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THE JOINTS.

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To-night I have to speak to you upon diseases of the joints. It is not easy to draw the line between those cases which belong to the physician and those which belong to the surgeon; but of course my attention will to-night be principally given to the diseases which, by common consent, are considered to be surgical. Necessarily there must arise, in connection with the treatment of such important matters as diseases of the joints, many questions which are common ground for the physician and also for the surgeon.

In the first place, with regard to acute synovitis. Acute synovitis is common enough in the physician's practice, as the result of acute rheumatic fever. In the surgeon's practice it is more frequently the result of some injury, either a wrench of the joint, or it may be a puncture of the joint, which has led to acute synovitis.

Perhaps it will be convenient to deal with cases of puncture of the joint first, because one or two points of interest arise early in the case, and one has generally the opportunity, in a case of punctured joint, of seeing it from the first.

Let us suppose then, for a moment, that a patient drops his penknife on his knee and punctures his knee-joint. What are the evidences? In the first place there would be a little bleeding, but very little, and then there would be an escape of synovial fluid from the interior of the joint, and nothing can be more easy to recognize than that, because it is exactly like the white of a fresh egg, and any one with the least power of observation would note the flow. There is just one fallacy which I think it well to mention in connection with that, viz: that it is possible that a puncture of the bursa in front of the patella may give rise to a fluid very, but not precisely, like that from the interior of the joint. But in the first place the position of the puncture would pretty well point out that it was the bursa, and if any doubt arose about it, the surgeon would be wise to thoroughly cleanse a probe, and dip it into a little carbolic solution to render it antiseptic, and then introduce the probe for a moment into the cavity, and he will at once ascertain whether it is a limited cavity, that of the bursa, or whether it is a large cavity, that of the joint.

Suppose that it was in the joint. There should be no question as to what the treatment should be. The puncture should be closed as soon as possible, and I myself advise that in anything except a very small puncture, there should be a stitch put into the skin to draw the parts firmly together, and then that collodion should be painted on. I look upon it as most important that the wound should be closed as soon as possible, but there, of course, comes the question whether it is desirable to take antiseptic precautions. So much must depend upon the nature of the case. If the individual were a fairly clean individual; if his clothes were fairly clean; if the knife were a clean knife, and there were a simple puncture through which synovial fluid escaped, for my own part I think I should trust to the probability that the knife was cleaned thoroughly by passing through the clothes, and that no matter of a deleterious character had been carried into the interior of the joint. But, of course, circumstances would be very different if, as happened once in the dissecting room at University College, a student who was dissecting dropped a scalpel which he was using on the dead body, upon his knee and punctured the knee joint. In such a case as that, or in the case of a person with exceedingly dirty clothes, where the knife must have taken some dirt from the clothes into the joint, then I should be inclined to wash the wound thoroughly, syringe it, possibly enlarge it, if it were very small, so as to be able to get the syringe in, and to wash the joint out once with a very dilute solution of carbolic acid. But when this is done the wound ought to be closed.

What is to be done to keep down synovitis? because that is really the great object. I have the greatest faith in cold. I believe if you will put on ice from the very beginning in a case of that kind, you will prevent the occurrence of synovitis; but the icing must be thoroughly done, and that is just one of those things that it is a little difficult to manage. I mean it must not be simply cold applied for an hour, and then the dressing allowed to get hot, because if you do you will bring about an amount of reaction which will be very great, and you will not only undo all the good you ought to have done, but you will actually inflict a good deal of injury.

When I say ice should be applied, I mean a continuous icing should be applied, for twenty-four hours at least, because then we may hope that the danger of inflammation is passed.

But supposing that we do not see the case so early, or at all events, that synovitis occurs; there would be all the local symptoms of inflammation—pain and heat—and the swelling, which is due, of course, to the effusion of synovial fluid. Now I take it that we are more familiar, most of us, with the distention of the joint in the chronic condition; but it makes no difference, of course, whether it is acute or chronic, there is the distended knee joint; the patella floats; you can press it back, and rap it against the condyles, if you like, if the tension of the joint is not too great. If the tension is very great you may not do that, but there are the synovial pouches well distended with fluid. I take it that that distention is one of the great elements in sending a patient's temperature up. The temperature will range from 102° to 104° F., and the patient will be very ill. I think that experiments have shown quite conclusively that the mere presence of fluid producing tension is quite sufficient to raise the temperature, and therefore obviously the indication is to reduce that tension as soon as possible.

Now there is no method better and no method simpler, or more safe, than to aspirate the joint. I have frequently aspirated knee joints without the slightest trouble afterwards, and I am quite sure that, with a fine needle, carefully disinfected, and with the skin disinfected too, you will have as little danger as it is possible to have in drawing off fluid from the knee-joint.

As to which side of the knee should be aspirated, I do not think it very much matters. Theoretically it is said that it is better to enter on the inner than the outer side. I do not think it makes the slightest difference, so long as the joint is punctured carefully and the fluid drawn off; and then when the fluid is drawn off, absolute rest for the patient. The limb should be put upon a splint. There should be then not the slightest movement allowed, and for my own part, I then smear the joint all over with belladonna and glycerine; I mean equal parts of extract of belladonna and glycerine, which, I find, is one of those things that tends to prevent inflammation, to relieve pain, to constringe the vessels of the part; and, in fact, I think mainly by my action, the application of belladonna has become now in English surgery, the common application for all cases of local inflammation.

Another thing that I would venture to lay a little stress upon, though perhaps I may trench upon the physician; and that is, that I am old enough to believe in what the old physicians called the *primæ viæ*. I mean that we have a long intestinal canal that is very apt to be overloaded. The physician of the present day, I am afraid, does not very much believe in the *primæ viæ*. He believes more in neuroses, and he gives everybody bromide, and things of that kind. But I like to begin the treatment of a surgical case with a good purging, and I am quite sure I am right. You may take it that, if you have got to operate upon a patient, unless you have your patient under your care for a few hours beforehand, and get his bowels to act freely, you will have trouble immediately after the operation. He will have fever, he will be sleepless, he will be altogether uncomfortable. But if you take such a patient, and give him a good pill over night, and follow it up with a black draught or anything you like in the morning, before you operate, and get his bowels fully relieved, then that patient simply has an uneventful convalescence.

Say that a case of this kind arises: a man struck down, we may say, in perfect health, as it appears, but still very likely with an overloaded bowel, and a liver which may be somewhat congested. If you get that patient's bowels freely opened, his temperature will go down; he will lie comfortably in bed and get well much more quickly than if you do not do so.

There is one form of synovitis which is distinctly surgical, and which is often overlooked, I am quite sure. Whenever I find a young man with inflammation of a single joint, I always inquire as to the question of gonorrhea, and I generally find it. I think it is a point to be impressed upon every surgeon that a monarthrosis—that is to say, an inflammation of a single joint, in an otherwise healthy young or middle-aged patient, is generally connected with gonorrhea or leucorrhea, for I am quite sure that in many cases it is leucorrhea in the female, and not necessarily gonorrhea; but in the male it is always gonorrhea, and a little investigation will show that the patient has recently suffered, or is actually suffering from that disease.

Now I must just say one word with regard to what is called gonorrheal rheumatism. Unfortunately it is called rheumatism, which is a very bad word for it. It is arthritis, and it is due to the gonorrhea, and I believe myself that it is a very mild form of pyemia. It is said by some persons that it is an affection of the nerves. Jonathan Hutchinson, who is a great authority on many subjects, but with whom I venture to differ on this matter, holds that it is some obscure affection of the nervous system; but I say that it is a very mild form of pyemia, the result of the gonorrhea. And I think the proof that it is so is the fact that I cure my cases rapidly by giving them large doses of quinine. Of course, you may say, "Well, that would do equally well for a nervous complaint." So it might, but it certainly is a fact that if you give these cases of gonorrheal rheumatism, so-called, 5-grain doses of quinine every four or six hours, and at the same time if you cover up the joint with belladonna—a fomentation outside is a convenient way of doing it—and let the patient lie quiet in bed, these cases get well very rapidly and without any subsequent trouble. I may say that gonorrheal rheumatism is held by some people to be a very troublesome and difficult thing to treat, and very likely to leave behind it ankylosis of a spurious nature—false ankylosis of the joint. I do not find that to be the fact. I find that with 5-grain doses of quinine I can cure these cases rapidly; that within a week or two they are able to go out with a perfectly healthy joint. Of course, one puts on a bandage afterwards, and so on, to support the joint; but I mean that these patients are not confined for weeks, as they used to be, in splints, and they certainly do not lose the use of their joints.

I have so far sketched a case of synovitis which has got well. But all cases of synovitis do not get well. I mean they may go on to suppuration. If the inflammation is exceedingly acute, or if the patient's health is broken down somewhat by previous excesses, it is quite possible that suppuration will take place. Of course, if there is some septic matter in the joint, then it is almost certain the joint will suppurate.

I do not know that there is anything more difficult than to be quite sure, positively certain, that a joint has suppurated. You see a joint full of fluid; you find considerable tension; you have a good rise of temperature, and you will claim, in all probability, that the joint has suppurated, and I should say so, too, but I should be very loth to cut into that joint without first aspirating it; and it seems to me wrong to run the possible risk of such a serious mistake as cutting into a joint which has not suppurated, when it is so easy to ascertain what the condition is by means of the aspirator.

Another reason why you may advantageously aspirate the joint, is that I am quite sure there are cases where suppuration is only just beginning, where the fluid is not actually purulent, but where it is synovial fluid, loaded with white corpuscles, that will in the course of a very few hours become purulent. I feel quite sure, from cases I have had, that you can cut that inflammation short by washing the joint out with carbolic acid; I mean a 1:40 solution of carbolic acid. I have had several cases of that kind where the joint was just, as it were, on the eve of suppuration, and where I have washed out the joint with a carbolic solution, kept up rigid fixation upon a splint, and the patient has recovered without actual suppuration taking place. But if suppuration has really taken place, then I am afraid there is nothing for it except a free incision, and probably, as a consequence of that, the patient will lose the use of his joint.

But now we have suppuration of the joint occurring in another way, which it is well to bear in mind. I remember particularly a woman who was brought into my wards with this sort of history. She had been confined some two or three weeks before, and had been very ill, then that her joint had become distended, and at last she was sent into the hospital. I found a woman somewhat emaciated, evidently very ill, with a high temperature, and with her joint, I forget which knee-joint at this moment—evidently enormously distended with fluid. Taking the history of the case, and all into consideration, I had no hesitancy at all in saying that her joint was full of pus, the result of pyemia. Accordingly, I put her under chloroform, made a free incision, and let out a very large quantity, I forget exactly at this moment the amount, but a good many ounces of pus from the interior of the joint.

Now those, of course, are very serious cases, because the local condition is an indication of the general condition, and most likely in these patients, as occurred in this poor woman, she had also an abscess of the liver which killed her. As regards the joint alone, she would have got well. I took good care to keep the wound aseptic, and she was making very good progress, but the abscess in the liver enlarged and developed, and she eventually died from that.

So much, then, for what we may consider, I think, as the acute diseases of the joints. What I say with regard to the knee, of course applies to other joints, only that I take the knee because it is a large one, and it is a convenient one as an illustration. But you must bear in mind that in all the joints the changes are very much the same, and that they are modified, as regards their external symptoms, by the anatomy of the part. For instance, the elbow, where the bones fit so exceedingly close together, you cannot expect, of course, the movement that you have in the case of the patella. So with the other joints, each joint has its distinct characteristic, which I am not going into to-night.

Now, passing to chronic disease of the joint, I dare say you all know that in England, at least, we have a great deal of tubercle. It is the fashion rather of the present day to put down every chronic affection to tubercle. I believe it is erroneous. I am quite sure that there are many chronic conditions which are in no way connected with tubercle, but it is a fashion of the day to consider that everything is tubercular; and there is another fashion, that we are not allowed to call things tubercular, as they used to be, but we call them "tuberculous." I do not see why, and I do not see the advantage of it. I was very glad the other day, in conversing with one of your physicians here, to find that he spoke of tubercular matter, and so on, and I said, "Why, I am very pleased to hear you use the old terms, which we are told in England are quite erroneous." We will call it, if you please, tubercular or tuberculous, just as you like.

The history is this: We have badly nourished children, children brought up under very disadvantageous circumstances, who come, perhaps, of tubercular parents, and whose tendency, owing to bad feeding and bad hygienic conditions under which they are brought up, no doubt is downward rather than upward. I am quite willing to say that no doubt in many of these cases there may be scattered tubercles in the lung, or even on the peritoneum. In these patients we find that they get a chronic thickening and enlargement of a joint, and again, if you please, as it is the most common, we will take the knee joint as an example. In these children there is not much pain. They get about, but there is the joint swollen, and, perhaps, if the mother is a little attentive, she brings the child to you in the early condition. You are then able to make out that there is a swelling of the joint; that there is no fluid in the joint, but that it is distinctly swollen, and, with a little care, you can make out that it is due to a thickening, apparently, of the synovial membrane, and we know, by examination of numerous specimens, that there is a deposit beneath the synovial membrane and between that and the connective tissue of the surface of the bone; that there we have a deposit which thickens the parts, which of course necessarily limits the cavity of the joint, interfering, therefore, with the movements of the joint, and giving the characteristic roundness to the joint which we know is common enough in these chronic cases. These cases come to the hospital, and the question is, What is best to be done for them? If we could do what would be best, it would be to send them all down to the seaside, no doubt; but that is not possible, and then we have to do the best we can for them, and that is generally to endeavor to fix the joint by means of some light apparatus—not keeping the patient in bed, because that really is very important. The beds of the poor in London are generally in very small rooms, which are very badly ventilated, and it is very much better that a poor child should go out on crutches, if it is only into the little court where the house is, rather than to be shut up in the house itself with all the bad air there, which is not properly changed from day to day. That is one great reason why the apparatus, whatever it is, that the patient has on, should be as light as possible to secure fixation, without, at the same time, laying the patient up.

Having fixed the joint in that way, we do all we can to improve the patient's health. We give iron and codliver oil, if it is in the winter, and the child can absorb the codliver oil, and we try to get it better fed by the benevolent ladies and gentlemen of the district, and we do everything of that kind we can, particularly, if possible, to get these children down to Margate. Margate is down on the coast of Kent, on the eastern coast of England. The air there has a remarkably beneficial effect in these affections, and I believe it depends upon this, that there is a great extent of rock in front of the cliffs, on which there is a large amount of seaweed, and when the tide goes down, we find that that exposure of the seaweed gives rise to a strong marine smell. I do not know whether it is ozone, for ozone has gone out of fashion, like some other things; but it certainly is very good in those cases; and it is a matter of notoriety that the Sea-bathing Infirmary Charity at Margate is really one of the most beneficial for the London poor that we have.

Of course the disease may be arrested by these methods, and it may subside. For my own part, I do not think you do very much good by any local applications in these cases—in the early stage, I mean. Certainly, blistering, which used to be such a favorite remedy, does rather more harm than good. If anything is done, I content myself with rubbing in iodide of potassium liniment, which I think answers better than anything else. I never paint these joints with iodine. For my own part, I do not believe iodine is of the slightest use unless it blisters. Well, that is an exceedingly painful process, and the mere painting it on with a brush periodically, I do not think is of any good at all, and it certainly damages the patient's clothes. If you use the iodide liniment of the English pharmacopeia, and I suppose you have something of the kind here, and have the joint assiduously rubbed with it once or twice a day, I think you will do some good, and that is the line of treatment I adopt.

These cases, unfortunately, do not generally remain stationary. They make progress, and they make progress in this way, that the disease, which was at first entirely confined to the synovial membrane, eventually goes a little deeper, and we have symptoms of affection of the bone; not an affection of the cartilage—and it is curious how clinical facts have corrected wrong pathology of former years. I remember when I was a student, it used to be taught that cartilage, when it was ulcerated, was exceedingly painful. We know, as a matter of fact, that cartilage is a non-sensitive tissue, and may be ulcerated, and will not produce the slightest effect at all; but the moment the bone immediately beneath the cartilage becomes affected, if it is merely hyperemic, we get pain, and that is what happens usually, just about the same time as the ulceration of the cartilage. When we get the two surfaces denuded of cartilage, and the two bones coming together, we get that characteristic jumping of the limb at night, which used to be said to be a symptom of ulceration of the cartilage, but which is really a symptom of the affection of the articular ends of the bones. The patient is just going off to sleep, and within a minute or two of dropping off to sleep, the limb gives a jump, the patient wakes up with a cry, and it is some time before the child goes off to sleep again. What is the explanation? The explanation, of course, is this, that during the waking period the muscles fix the limb, more or less, and fix the joint; but the moment that sleep comes on, and the effort of the mind is taken off, then the effect of the counteracting muscles, being lost, the muscles which are acted upon by the same nerves which supply the joint, suddenly contract, particularly the strong hamstring muscles, in the case of the knee, and thus the two tender surfaces are forced together and spasmodic action induced.

In these cases, then, we may take it that the disease has gone beyond the synovial membrane, the cartilages must have been, to a certain extent, involved, and the bone at least hyperemic. It does not follow that the bone is necessarily carious, and it is only when it is very extensively carious that we get anything like grating of the bones. In these cases modern surgery has been able to do a good deal. Up to the time of the introduction of anesthetics—I presume you all know that anesthetics were introduced in 1846—up to that time, and a little later, the only operation which was ever undertaken for a diseased joint was to amputate the limb above it, and in all the older museums in London, and in England generally, and in fact everywhere, you will find beautiful specimens of diseased knee-joints which came from patients whose limbs were amputated as the only method of curing them. It was only by the efforts of Syme, Liston, and Fergusson—for these were the three men who had most to do with it—that excision or resection of the joints came into practice. I do not remember at this moment whether it was Syme, or whether it was Liston, that did the operation first, but they both did a great deal to advance such surgery, and Fergusson was the man who followed it up in London, and who forced it upon his colleagues. I can remember as a young student the very strong feeling there was among the older surgeons of the more conservative hospitals against excision. They said that Fergusson did it, and that he killed most of his patients. Well, now, there was an element of truth in that, but I will explain that presently. No doubt a good many cases died that ought not to have died, but still the operation made progress, and as the older surgeons fell away from the hospitals and were succeeded by younger men excision was taken up, and in some cases, I think, carried out to a very great excess. I do not want to mention names, but there are one or two surgeons in London who at one time were in the habit of excising—I mean absolutely excising—in children for very slight tubercular disease of the joint. That just shows how the swing of the pendulum goes. But we have improved very materially upon that. No one would think of excising a joint now when a very much less severe operation could be carried out; and that operation is an operation which is called arthrectomy. By which I mean that nowadays we open a joint which we cannot treat in any other way, and we cut away with scissors the synovial membrane, and we scrape the surface of the bone, if it is exposed, or the cartilage, if that is bare, and we remove all the debris from the interior of the joint, and thoroughly wash it out, and then close the joint with antiseptic precautions, and we find that we get exceedingly good results. I do not hesitate to say that arthrectomy, as it is called, is now an operation fully recognized in England, and one which is saving a great many children's limbs.

The drawback to excision in children, of course, was that the bones were so much interfered with, particularly the epiphyses, that the limbs never grew as they should do afterwards, and there are many cases on record of patients who had limbs excised as children who grew up with little stunted limbs, which were practically of no use to them. That is not the case when arthrectomy is performed. Arthrectomy does not interfere with the growth of the bone, but it tends to get rid of the local disease, and if the patient gets over the immediate operation, he recovers with a very useful joint—in some cases with a movable joint, but that, of course, depends a good deal upon how much disease there was at the time of the operation.

But do not let me be supposed to say that every case of tubercular disease of the joint requires even that operation. I am quite sure of this: that with due care, and with attention to the general health, and with patience—because that is a great element in these cases—we can cure a great many cases which at first appear somewhat hopeless. The fact that patience has a great deal to do with it, is shown by the well-known fact that there is hardly on record an operation of either excision or arthrectomy among the children of the better classes. That children of the better classes have tubercular disease of the joints, there is no doubt; but the explanation is that where the parents can afford to give every possible help to the child, where time is no object, and where money is ample, those cases recover. But with the poor, where there are none of these conveniences, then, of course, the best has to be done that can be done, and in many cases an operation is required which, if circumstances were more favorable, would not be necessary. But, even among the poor, I believe you can very often relieve the symptoms, particularly that jumping of the limb at night, by other methods less severe than arthrectomy, and before doing arthrectomy I always myself use the actual cautery. I believe that the actual cautery, two or three lines drawn along the side of the joint pretty deeply into the skin, will act like magic in some cases, and the patient recovers very rapidly. It appears, of course, rather a startling thing—firing as you would a horse—but after all it is an exceedingly good remedy. You put the patient under chloroform, and the whole pain has passed away before the child wakes up from the anesthetic.

I myself believe very strongly in rest, in counter irritation by the actual cautery, which is much more effectual than mere blistering; in building up the patient's strength in every possible way, and, if possible, getting him away to the seaside. Failing that, then arthrectomy, and of course there will be cases, from time to time, where excision may be required.

I will just explain why those cases of excision of Fergusson's did so badly. In the first place, King's College Hospital, in those days, was in about as bad a hygienic condition as it is possible to conceive. Imagine what the state of things was. Fergusson came up from Edinburgh in the year 1840, and in order that he might have a hospital, the authorities of King's College bought up an old workhouse standing upon an old burying-ground, and the wards were converted into the best that they could be for the patients. An operating theater was built, in which all of Fergusson's earlier operations were done; and in order to get that theater, some of the bodies in the burying-ground were dug out, and a space was made for the theater. The lower part of the theater was positively used as the dead-house, and the theater where the operations were done was actually used as a *post-mortem* room. It was in direct communication with the main surgical wards, and I have seen, in my younger days, Fergusson doing an operation, and then, as soon as he had finished, the theater was cleared, and a body was brought up from below for Dr. Todd or another physician, to make a *post-mortem* examination. Now, can you conceive, in the light of our present knowledge, of hospitalism and asepticism, and so on, any condition more likely to lead to death from pyemia?

There was another curious thing—for it is a matter of history—that I will just mention: That Fergusson, in all his earlier operations, allowed the patients to be taken from the theater, without the application of any retentive apparatus, the patient was carried to bed, and in an hour or two afterwards the house surgeon, at his leisure, put up the limb upon a splint. You know, of course, a limb like that should be fixed from the first, but it was only at the very time that I was his house surgeon, in the year 1858, that the practice was changed, and from that date the limbs were fixed before they left the theater, and the improvement was rapid.

Leaving that subject, let me say just one word with regard to another question in which tubercle is involved. That is the question of what is to be done when a patient has advanced tubercular mischief in the joint, and at the same time you find tubercular mischief in one or both of his lungs. There is a patient, emaciated, with night sweats, and all the obvious symptoms of phthisis. Is anything to be done, or must the patient be allowed to die? It is a very remarkable fact that these patients who suffer from advanced phthisis, and also advanced tubercular mischief of the joint, rally in the most rapid manner if you will only amputate the limb. It appears that the limb is what is doing the mischief, not so much the lung, and if you will amputate the limb in a healthy part, and get rid of the source of the mischief, it is astonishing how those patients rally. I do not say they get absolutely well, but they recover up to a certain point, and if the disease in the lungs has not gone beyond a remedial point, they do even recover, and live for some considerable time. I merely mention, from my own experience, that I have no hesitation in recommending an amputation in a case of advanced phthisis, provided, of course, the disease is not too far gone.

Then there is a disease which we have to deal with in those cases where there has been prolonged suppuration, viz: lardaceous disease of the liver, which we find in children, where a joint has suppurated. Where there has been prolonged caries of the articular ends of the bone, and a discharge of pus going on for weeks or months together, you are apt to find that you have a very large liver, and that you have urine containing a large quantity of albumin, and on *post-mortem* examination of such a case you will find a large lardaceous liver, and also lardaceous kidneys. In those cases, the only possible chance—and it is but a poor one—is to amputate the limb. But again, I have seen most remarkable results sometimes from an amputation done so as to get rid of the source of the mischief, and then getting the patient down to the seaside. They sometimes make almost miraculous recoveries.

Of late years attention has been called to the fact that there is a disease of the joints which is probably syphilitic. I do not know why the joints should be the only part which would escape the effects of syphilitic poison. We know how the bones are affected with syphilis. It is not at all surprising that the joints should be affected, too, but it is a fact that attention has only of late been called to it, and there have not been very many cases reported of the disease. I have here a plate which illustrates rather well, some cases recorded by Mr. Bowlby, of St. Bartholomew's Hospital, and I will pass it around. You may see that there have been gummatous deposits, or what appear to be gummatous deposits, on the surface of the bone, and also on the articular surfaces, and there has been considerable destruction of the articulation there in both those instances, and the history, I think, was pretty conclusive that it was syphilitic disease. I mention it because at present we do not know very much about it, but I think that one should always be on the lookout for it; that, given a patient who has disease of a joint, with a distinct history of tertiary syphilis; you will be quite right in putting the patient under the influence of iodide of potassium, and seeing what the effect would be. I imagine that as time goes on we shall find that there are a good many cases which are put down as rheumatic, or under some such name as that, which really are syphilitic cases, and which can be practically cured by the ordinary anti-syphilitic remedies.

I am going to trench for one moment on the ground of the physician again, merely to mention that of course in gout we have gouty affections of the joint. We have a deposit of urate of soda upon the surface of the articular cartilage, giving rise to that curious white deposit which you can see in Garrod's book, or in preparations, I have no doubt, in your museum. We British people, or rather we English people, for it does not apply to Scotland and Ireland, are especially liable to gout, and the explanation probably is that our forefathers drank a great deal more port wine than was good for them. You may read the histories of the "two-bottle men" and the "three-bottle men," which means that gentlemen sat down early in the evening to drink their two or three bottles of port wine before they reeled off to bed. I beg leave to say that that sort of thing does not exist in the present day, but we inherit from our grandfathers, no doubt, in many cases that gouty tendency, and we see it in patients with little gouty nodules, which are not very uncommon in the margin of the pinna, and so on. Those are very characteristic of gout. But among the lower classes it is not port wine, for they do not get it; it is beer that brings gout. We are a great beer-drinking nation. I suppose it is partly the climate. I only wish we could get our people to do as you do here, and drink ice-water. Even if they would drink the excellent lager beer that you have it would be very much better. But an ordinary Londoner is not satisfied unless the beer is somewhat heady. I mean, he likes to feel the effect of his beer. When he has had his beer he wants to know that he has got it on board. It is that strong heady beer, which I am sorry to say is in many cases adulterated with other matters, that is so very bad for our people, and which makes them gouty. I do not think gout is so common as it was, but still there is a great deal of it about, and it consists essentially in the deposit of urate of soda on the synovial membrane, and particularly on the articular cartilages of the joints.

Then there is another disease which we see a great deal of in London, and that is rheumatoid arthritis. I mean where you have patients, and generally middle-aged and badly nourished patients, who have more or less thickening of the joints, and that sometimes goes on to very great deformity of the fingers and toes. It is, no doubt, a disease of bad nutrition. There is a certain amount of deposit in the cartilages of the articulations, and as the cases go on we find that the joints become more or less creaky—they creak as the patient moves. When you come to make an examination, *post-mortem*, of one of these joints you find that the cartilages have undergone very considerable change; that really the cartilages have disappeared, and that the bone which has taken their place is of an ivory consistence, and you find that it is grooved very deeply where the two bones have worked one upon the other. There are generally also osteophytic growths outside the joint, giving that very characteristic appearance which is very well recognized in England, at least, of rheumatoid arthritis.

In the early stage probably that disease may be curable. Some of our waters are thought to be very beneficial, particularly the Bath waters, which are warm and slightly chalybeate, and the waters of Buxton, where the waters are also slightly chalybeate and saline. The fact is that the well-to-do-patients go to Buxton in the summer months—Buxton is well up in Derbyshire, and it is a very pleasant place—and they go to Bath in the winter months. I have sent from time to time patients down to what is called the Water Hospital at Bath, and certainly they improve there drinking the water and also bathing in the water. It certainly seems to do this somewhat obscure and very chronic disease good.

Now, with regard to the joints, there is just one more matter which I should like to mention, and that is the occurrence of loose cartilages or bodies in the interior of a joint. It is a very old thing. John Hunter describes it extremely well, and there have been plenty of descriptions of it since. A patient is apparently in good health; has had no injury to his joint at all; but he finds that while he is walking he suddenly gets a violent pain in the joint, and very often falls to the ground. The joint is found to be a little swollen afterwards. Perhaps if he lays up for a day or two the swelling subsides and he feels all right again, and at a variable period the same thing occurs, and at last he finds, or the surgeon finds for him, that there really is a little loose body which moves about in the interior of the joint, and which you can find by careful manipulation by the side of the patella from time to time, but the moment you touch it it disappears into the interior of the joint, and perhaps you may not find it again for some days. Those little bodies are very curious, and it is remarkable that John Hunter, in his paper, acute observer as he was, lays it down that those loose cartilages were the result of organization of blood clot. You know John Hunter had rather an exaggerated notion of blood, and he had a notion, there was no evidence to prove it, but it was a conclusion he came to, that those little bodies must be the result of a small clot which happened to have occurred in the joint and which became organized.

In the first place, it is impossible that blood clot can organize into cartilage, and in the next place, there is a very much more feasible explanation in these little fringes which you all must have seen in the knee-joint. In certain cases these become very much hypertrophied, and then no doubt one of them becomes more or less formed into a little body containing cartilage, and eventually the pedicle breaks, and it gets loose in the interior of the joint. You may, by opening the joint, find quite a number of these fringes in various stages of development, and you may see in various books drawings of them. It is not very wonderful, then, that from time to time one of these little bodies gets loose, and then it produces those characteristic symptoms which I have endeavored to describe. It is not difficult to diagnose, but it is very difficult to catch the body, and you have to get the patient to take an interest in it and to find the body, and then to send for you directly he has got it, and to hold on to it until you can come.

The question is, What is the best thing to be done? In the old days, when there was a very great fear of opening joints, and naturally so, surgeons tried to fix these foreign bodies by blistering over them. I do not think it was effectual. I never saw it of the slightest use, but that was about all that was suggested. Then it was suggested that it might be well to take the body out, and accordingly surgeons used occasionally to cut into the joint and take the body out. I have seen that done, and I have seen most disastrous results—suppuration of the joint and loss of the limb as a consequence. Of course, to cut into a joint without any antiseptic precautions, is always a risky thing, and in the days when cleanliness in surgery was by no means considered, it was not very wonderful that suppuration followed.

The result of these operations being so very unsatisfactory, Mr. Syme suggested that it would be better to cut in by an oblique incision, and to slip the foreign body—for it was practically a foreign body—out of the joint, but to leave it beneath the skin. That operation proved to be a very satisfactory one, and it was followed up by Mr. Squire, of Plymouth, who had a large number of very successful cases, making a free subcutaneous incision into the joint, slipping the loose cartilage out under the skin, and leaving it there until the joint became quiet, and then either removing it or possibly leaving it altogether. That was the practice up to the time, twenty years ago, when the Listerian treatment came in, and now we all, of course, cut directly into the joint, and take out the loose cartilage, with strict antiseptic precautions, and with the very best results. It is very much better that it should be done in that way, because it is done so much more quickly and so much more readily, and, moreover, you are quite sure that you get all the bodies out, for very often there are two or three, and it is, of course, no use removing one, you must remove the whole number. It is readily done by making an incision straight into the joint, with strict antiseptic precautions, and then emptying out the joint, closing the wound, and putting on an antiseptic dressing, keeping the limb perfectly quiet, and those cases do remarkably well.

Now, in connection with that very strange subject, there is another cartilage which becomes loose, which must not be confounded with these loose bodies. I mean the semilunar cartilage of the knee joint. This, from time to time, owing to a violent wrench of the joint, becomes loosened from its attachments to the surface of the tibia, and then this remarkable thing occurs: The patient has had a fall, possibly, and has had a wrench to his joint, with a good deal of pain, and that pain is referred particularly to the inner side of the knee, and when the patient tries to extend his knee, he finds that he cannot. He can put it to a little beyond a right angle, but not much, and he cannot put it any further. Now, what has happened there is, that the semilunar cartilage has slipped, and that it is a little out of its place, and being, as it were, the little washer between the two bones, it prevents the bones going into their proper position.

Those are the cases which can be cured by a little judicious violence, and they are the cases which are so successfully treated by what we in England call "bone-setters." I really do not know whether or not bone-setters exist in America, but in England we have them. We have a class of men, who are very often blacksmiths, and certainly some of them have a knack of putting little subluxations—for they are not *bona fide* dislocations—of putting subluxations of the joints into place, and of breaking down adhesions, which sometimes the surgeon is afraid to do, and they certainly have a local reputation in many places in England. There was a very well known man some few years ago in London, named Hutton, who certainly did—there was no pretence about it—make some very remarkable cures. Some of the most remarkable cases of his, and of the bone-setter class generally, were these very cases. What you want to do is, to take the patient and flex his knee forcibly, and then, pressing the cartilage into its place, you fully extend the knee. The best plan, I find, is to put the patient on a chair, and, standing in front of him, put his foot between your own knees, and then, gripping well hold of the knee, you forcibly flex the knee suddenly. It is painful for the moment, but then you find that the cartilage has gone into its place. When it is once in its place, I think a blister over the position of it helps to fix it, and I generally, therefore, when the inflammation due to the manipulation has subsided, put on a blister once or twice over just the position of the inner tuberosity of the tibia, and those cases generally do well. It is well, also, to let them wear a support. They should have some kind of a knee-cap, with a little pad made to fit against the cartilage, because where the cartilage has once slipped out, it is apt to slip out again, and by a support of this kind, it is possible to prevent it.

I think I have now run through most of the points of interest in connection with the surgery of the joints, and, as I said before, there necessarily are many points in which medicine and surgery meet.

AN ADDRESS

Delivered at the Semi-annual Meeting of the San Joaquin Valley Medical Society, held at Bakersfield, October 12, 1897.

By W. N. SHERMAN, M.D., President, Merced, Cal.

I desire, briefly, to call your attention to a few of the many conditions that are an obstuction in the path of success to the general practitioner. Many of these conditions exist through his own fault, some through the fault of others.

The colleges, medical, are grinding out doctors by the hundreds, the Eastern States are contributing rapidly to this number already here, and the time is not far distant when we shall have a doctor to every one hundred inhabitants, unless fortune shall bring us an unexpected increase in population. Some of our Eastern brethren coming among us, with depleted purse, are eager to gain a foothold, and advertise their services at less than Eastern prices. This unfair competition, in thinly settled country districts, is a hard matter to contend with, unless we can induce these men to join our local and State societies, and thus bring them into a harmonious relation with the balance of the profession.

With the constant and rapid progress of the science of medicine, and with its collateral branches extending into new fields, an increased amount of labor and of learning is required of the medical man, if he gives to his patients the benefit of the best treatment of our time. With this continued demand for closer application and higher education, in addition to the usual burdens of his professional work, we should expect an increased compensation and an enlarged patronage; but under present conditions it seems to be the reverse.

For a lifetime of devoted study and continued work, enduring with patience all the hardships of a general practice—what with the most prudent and economical management, has he to show for it at the end? Is it a sufficient reward, that he has, by strict economy and self-denial, been able to live comfortably and educate his children?

For the past six years with the country doctor, the pinch of hard times has been severe, and with the unfair competition of druggists, society practitioners, specialists, and advertisers, and the difficulty of making collections from impoverished patients, the struggle has been a hard one. Where are we to look for relief? Many of our difficulties can be remedied by ourselves. First, we need thorough organization and faithful devotion to the best interests of the local profession. Every county should have a well organized, active, harmonious, medical society. If this be impossible, its physicians should become members of the nearest medical society. The approaching meeting of the State Medical Society, at Fresno, is an event that should stimulate every county to organize and join in advancing the interests of the State and local societies. Every member within hearing should make a strong personal effort to induce others to come into our Society.

It would be well for us, if we could treat all our cases without the necessity of sending them away to specialists. I believe it is the duty of every country practitioner to treat all his cases himself where the best interests of the patient are not compromised, and where able consultants are at hand when needed. If you feel that you are not competent to do this, it is high time you were preparing yourself. To be successful in the true sense of the word you must be a competent "all-around-man." This does not imply that you should attempt to treat the more delicate diseases of the eye, ear, nose, throat, etc., but that you should be as competent as the specialist to treat the ordinary diseases of these organs. In small cities, like Bakersfield and Fresno, it would be an excellent plan for each doctor to make a special study and to acquire special skill in some particular specialty, which he can easily do, along with general work. In this way, they could exchange cases with each other to the mutual advantage of all concerned.

When your friend or patient goes away to consult a specialist, or to enter a hospital, he is extremely liable to fall into the hands of dishonorable practitioners, who seem to hold in contempt the attainments of the American family physician. They will studiously attempt, in various ways, to destroy the confidence of the patient in his family physician, and finally to steal him. He will return home, alienated from his physician, and will use his best influence to send his friends to the charlatan. Various are the methods and deceit used to obtain the friendship of those cases. Some of them are maltreated, deceived, and robbed. They return home to tell the family doctor of his ignorance and back-woods methods, describing some great operation they have undergone, or some obscure disease found.

I would not have you believe that there are few honorable, fair, and honest consulting physicians, but I wish you to know there are many dishonest charlatans connected with public hospitals, and in private practice, who would resent such an accusation, yet they are the worst of this nefarious class of doctors. If necessary, I could recite many cases to prove the truth of what I say. I hope you will make a mental note of this, and strive to induce every friend or patient, who goes away from home for treatment, to go to some institution or physician, upon whom you can positively rely for fair and honorable treatment for yourself, and your patient or friend, as the case may be.

Are you aware of the encroachment of the druggist upon the province of the physician? It would be well for you to give this subject a little careful consideration. You are fortunate, indeed, if you have an honorable druggist; by this I mean one who does not yield to the temptation of prescribing. Only a day or two ago a patient came to my office with the exclamation, "Oh, dear, I had to come at last." She explained that she had been three days under my druggist's treatment, hoping to save the price of a consultation, but had not been relieved. My druggist is called "doctor," and from his private formulary of physicians' prescriptions and long experience he does not hesitate to treat any form of disease. I have been obliged, through self-defense, to order and dispense my own drugs. This is not a great trial, when you consider the convenient forms presented by the modern compressed tablets, granules, pills, etc. Nearly every druggist is a self-constituted doctor, without license or diploma, treating all the common ills of life. In the larger towns they have regular consultation rooms where they treat venereal and surgical cases for a small fee, or for the price of the medicine. Physicians are very foolish to tolerate such a state of affairs, and the only way to induce the thrifty druggist to abandon this lucrative field is to dispense our own medicines, or, where possible, to organize coöperative pharmacies for compounding of prescriptions only.

What shall we say of the injustice of the secret society methods and of the rich insurance companies. We have already by act and resolution refused to work for these organizations, and have handed them over to the homeopath and the low-priced competitor. This is by no means a just and satisfactory disposal of the matter on our part, but it is probably the best so far recommended.

We live in a peculiarly favored portion of the great State of California, a section that when developed presents a vast field with great opportunities. It must be admitted that our financial success depends upon the resources of these various localities In many places our chief dependence is upon wheat, in other localities it is fruit or stock, and so it goes throughout the whole vast domain which our Society represents. I refer to these facts to show how closely our interests are identified with those of the people, and how our reward for services rendered depends upon their thrift and success. Let us, therefore, have greater concern for their welfare and prosperity.

INDUSTRIAL LIFE INSURANCE JUSTIFIED.

By W. R. CLUNESS, M.D., Medical Director Pacific Mutual Life Insurance Company, San Francisco, Cal.

Read before the Sacramento Society for Medical Improvement.

I gladly avail myself of the present opportunity to address this Society, of which I am one of the oldest members, in order to point out some serious errors which many entertain concerning industrial life insurance. These have come to my notice in the report of the meeting held April 27th, which appeared in the June issue of the OCCIDENTAL MEDICAL TIMES. As an introduction to this subject, it is proper to give a brief outline of the origin of industrial life insurance, its objects, its progress, and its accomplishments.

The guilds of the middle ages were associations for mutual support and relief for workmen engaged in the same pursuit. These were followed by friendly societies in England, composed of people engaged in various industries, for the purpose of affording relief to members in sickness and death. In both cases funds were raised by contributions or assessments, generally as occasion required. For more than one hundred years these societies have been encouraged by legislation, and more than twenty Acts of Parliament have been passed for their regulation. As they flourished in the United Kingdom, crime and pauperism diminished; and in 1878 a Royal Commission, after four years' investigation, declared that they saved to the taxpayers £2,000,000 annually.

Industrial insurance is an outgrowth of the friendly societies, and arose in England somewhat more than forty years ago. Its object was to systematize the work of the societies by more careful selection of members, by including whole families in its scope, by fixing contributions to small weekly dues, with benefits proportioned to age of the member, and by limiting the amount of risk in every case, so that there should be the least danger of defrauding the company or of harm to the young and helpless for the purpose of securing dishonest gain. This system was introduced into our country in 1875, and it also exists in France, Germany, Austria, and Italy. In England, in 1895, there were 4,150,000 policies in force on the lives of children under ten years, and it is estimated that 80 per cent. of the children of the industrial classes are thus insured.

The rapid growth of industrial insurance in the United States is shown by the following figures: Premiums received in 1876, $14,000; in 1894, $32,962,420. The three largest companies, the Metropolitan, of New York, the Prudential, of Newark, and the John

Hancock, of Boston, in 1895, had approximately 7,000,000 policies in force, representing $766,000,000, or a little more than $100 to each policy. The same year the Prudential had 467,000 policies in force in the State of New Jersey, and other companies 420,000 more, for a population a little more than 1,500,000, or more than one policy to two inhabitants. In Newark, with a population of 200,000, the same company had in force 225,000 industrial policies. Such has been the growth of industrial insurance in our country in a little more than twenty years, that it now gives employment to 40,000 persons and its scope includes nearly all the States of the Union. Surely a business which gives a livelihood to such a number of persons, besides encouraging saving and thrift among millions of people, deserves something else than contempt and denunciation from those who have not had opportunity or who lack inclination to study its workings.

It was introduced on this coast at the beginning of 1895, by the Pacific Mutual Life Insurance Company, and thus far the success of the enterprise has exceeded the experience of older companies in the East during the opening years. That is to say, the outlay of money for launching the business has been less in proportion to policies issued; the gain of new business has been more rapid; the average amount of policies is much larger, and the death rate has been smaller.

Right here I take occasion to remark that some of the older men in our Board of Directors reluctantly consented to take up this branch of life insurance, but all are now entirely satisfied with the trial, and it has been decided to double the capital stock of the company in order to extend the work more rapidly. The new shares will be taken by the present stockholders, some of whom have offered to take all that are declined by others. Offices have been opened in the largest cities and towns in this State, and also in Oregon, Washington, Montana, Nevada, and Utah, and we are only waiting for the new capital, to include the smaller towns and to push the business more vigorously in the territory already occupied.

The character of a business enterprise is fairly evidenced by the standing of its managers, and now I wish to call attention to the *personnel* of our Board of Directors. Two of them are well known citizens of Sacramento, viz: Samuel Lavenson, merchant, and H M. LaRue, Railroad Commissioner and viticulturist. Of those living in San Francisco, I mention Henry T. Scott, President of the Union Iron Works; Geo. W. Scott, a Director of the Crocker-Woolworth Bank; Wm. H. Crocker, President of the same; General J. F.

Houghton, retired capitalist; Charles N. Fox, formerly a Supreme Court Judge; and the following men of high business reputation and wealth: Geo. A. Moore, President; G. W. Beaver, Vice-President; James Carolan, L. P. Drexler, James Irvine, D. W. Earl, W. R. Sherwood. It is not reasonable that these men would risk their money in a fraudulent or speculative scheme.

In evidence of the soundness of industrial insurance as a business proposition, I wish to say that in the course of more than forty years' experience, no company engaged in it has been found either fraudulent or insolvent; while during the same period a considerable number of ordinary life companies have made more or less disastrous failures, and the wreck of assessment and endowment concerns beyond numbering is our greatest obstacle to building up legitimate business.

It is not improbable that one of the strongest inducements to industrial insurance is to make provision for expenses of last illness and burial. Societies for such purposes have flourished much longer, but their success has been less satisfactory. Among the industrial classes of Newark, N. J., it was formerly a common occurrence to pass around the hat for a collection to meet funeral expenses, but industrial insurance has brought this into disuse. Among the population at large in Newark, during the years 1879–81, there was one pauper funeral to every 740 of the population; during the three years 1889–91 the ratio declined to one in 1,027 of population. During the same period the number receiving aid from the Overseer of the Poor steadily declined, as shown by 19,667 relieved in 1879, and 9,796 in 1892; and the amount of money thus disbursed decreased from $47,589 in 1879 to $16,965 in 1892.

Statistics are at hand to prove that, along with the steady growth of industrial insurance, savings banks, and building and loan societies, pauperism and crime have diminished in England and the United States. It is evident that these institutions work in harmony and encourage habits of economy and thrift among people of small means; and the contributions are so numerous that the aggregate results are enormous. The gain in moral standing is commensurate, as measured by decrease in public relief and crime. Published evidence of these is in my possession, but I shall not consume your time by its recital. It has been alleged that this life insurance diverts small savings from the more profitable destination of savings banks and building and loan societies; but experience shows that all these institutions have grown together in recent years. Between 1880 and 1893, depositors in the savings banks of our country increased from 2,335,000 to 4,830,000; deposits from $819,000,000 to $1,785,000,000; and the average of deposits from $353 to $369.

The most serious charge brought against industrial insurance is that it offers strong temptation to the neglect of young children, and even to their murder. This has been repeatedly and thoroughly investigated by legislative committees in England and in various States of the Union. The Friendly Societies Act of 1846 limited the insurance of children in England to those over six years of age. Since then the limit has been lowered, so that children of one year and upward are insurable. Seven parliamentary investigations have all failed to sustain the charge of criminal conduct growing out of this practice, and that ending in 1891 was the last.

In the United States various efforts have been made by well-meaning but ill-informed persons to prohibit child-insurance under the age of ten years. In 1889 a bill for this purpose was thrown out by a legislative committee in Pennsylvania. A similar attempt was later made in Ohio, with the same result, and also in Connecticut. In New York, after some agitation, child-insurance was legalized, and amounts were fixed according to the tables of the Metropolitan Company. In Illinois a prohibitory bill was introduced in 1895, but the committee to which it was referred, after investigation, offered as a substitute another, which embodied the features of the New York law. The same year a prohibitory bill was defeated in the lower house of the Massachusetts Legislature. In Colorado alone has legislation adverse to life insurance of young children been effected, and there it has been declared unconstitutional and is not in force.

The charge that child-insurance incites to crime, undoubtedly grew out of the fact that adults have been murdered in order to secure the large sums assured in their policies; but this fact has not been used for the purpose of effecting legal prohibition. I shall now endeavor to show how the alleged danger to young and helpless lives has been anticipated and averted by the companies engaged in the business. Your attention is invited to the following tables used for children by the Pacific Mutual Life Insurance Company; substantially the same tables are in use by all the industrial companies doing business in this country.

TABLE C.

REGULAR INFANTILE RATES — WHOLE LIFE.

AMOUNT OF INSURANCE IF LIFE BE RATED UNDER AGE 13.

For 10 cents per week twice the below-mentioned amounts will be payable.
For 15 " " three times " " " "
For 20 " " four times " " " "

No higher premium than 10 cents can be taken on a life between ages 3 and 5, or 20 cents between ages 6 and 12.

Age next birthday.	After 13 weeks and within 1 yr.	Amount payable for a weekly premium of **5 Cents** if the child insured dies after the policy has been issued for the following periods:									
		1 YEAR	2 YRS.	3 YRS.	4 YRS.	5 YRS.	6 YRS.	7 YRS.	8 YRS.	9 YRS.	10 YRS.
3	$17	$23	$27	$32	$38	$45	$54	$65	$80	$100	$120
4	20	27	32	38	45	54	65	80	100	120	
5	25	32	38	45	54	65	80	100	120		
6	30	38	45	54	65	80	100	120			
7	36	45	54	65	80	100	120				
8	45	54	65	80	100	120					
9	54	65	80	100	120						
10	65	80	100	120							
11	80	100	120								
12	100	120									

When the amount insured according to the terms of this table reaches $120, it will continue at that sum during the lifetime of the person insured, subject to the terms and conditions of the policy. No amount will be due or payable if death occurs within three calendar months of date of issue.

TABLE D.

REGULAR INFANTILE RATES — ENDOWMENT.

Payable at the expiration of 20 years or previous death.

AMOUNT OF INSURANCE IF LIFE BE RATED UNDER AGE 13.

For 5 cents per week, half the below-mentioned amounts will be payable.
For 20 " " twice " " " " "

No higher premium than 15 cents can be taken upon a life between ages 3 and 5, or 20 cents between ages 6 and 12.

Age next birthday.	After 13 weeks and within 1 yr.	Amount payable for a weekly premium of **10 Cents** if the child insured dies after the policy has been issued for the following periods:									
		1 YEAR	2 YRS.	3 YRS.	4 YRS.	5 YRS.	6 YRS.	7 YRS.	8 YRS.	9 YRS.	10 YRS.
3	$12	$25	$30	$35	$40	$50	$60	$65	$70	$75	$80
4	15	30	35	40	50	60	65	70	75	80	
5	17	35	40	50	60	65	70	75	80		
6	20	40	50	60	65	70	75	80			
7	25	50	60	65	70	75	80				
8	30	60	65	70	75	80					
9	32	65	70	75	80						
10	35	70	75	80							
11	37	75	80								
12	40	80									

When the amount insured according to the terms of this table reaches $80, it will continue at that sum till the expiration of said term of 20 years or previous death of insured, when that sum will be payable, subject to the terms and conditions of the policy. No amount will be due or payable if death occurs within three calendar months of date of issue.

In the pursuit of business, agents are everywhere instructed to avoid the slums in the course of their work. In the Eastern States, as well as on this coast, Negroes are avoided rather than sought, and throughout the country all colored persons are subjected to medical examination. Chinese risks are not accepted by our company in the industrial department, and Japanese risks with much caution. In order to prevent insurance of children for large amounts, it is also provided that a policy is voided whenever another one for like amount is taken out in this or any other company. As a result, comparisons made by several companies showed that, of all claims on infantile lives, only 2¾ per cent. had policies in more than one company, and that only three-tenths of 1 per cent. had applied for more insurance than the maximum allowed by one company. In 1894 the average of claims paid by the Metropolitan on white lives, 6 to 13 years of age, was $28.10, and on colored lives, $24.80. From the tables and from the amounts paid on children's policies, it is apparent that the inducement to neglect is inappreciable, and such is the deliberate intent of companies engaged in this business.

In further evidence of this statement, mortuary statistics show a lower death rate among insured children than the general mortality of children of the same age. This is shown by the following table, prepared by the Prudential Company, of Newark, showing the mortality per 1000:

Age.	Prudential Experience, 11 Years, 1883—1893.	English Life Table.	American Life Table.
1	61.55	65.59	62.78
2	30.35	36.14	35.38
3	20.35	24.33	23.62
4	15.23	17.92	17.47
5	11.85	13.53	11.20
6	9.04	10.75	9.78
7	6.93	9.16	8.99
8	6.10	7.69	8.16
9	5.40	6.57	7.39

If insurance led to neglect or murder of children, there ought to be increased mortality in evidence. The reverse shows the effect of the selection of risks. Now I deem it pertinent to ask whether a company could afford to pay people for murdering their children, and whether business men engaged in life insurance are likely to overlook any risks which outsiders would be likely to discover? Proof abounds that murders have been committed for the purpose of defrauding companies on large life policies, and arson is an appreciable risk in fire insurance. Does it follow that ordinary life or fire insurance must be abandoned because they sometimes lead to crime?

I come now to the matter of examination fees, which seems to be the special grievance of this Society, and the point upon which decided action has been taken. Our scale of fees is substantially the same as that in force among the Eastern companies, with this modification: For a policy of $1,000 and upward a record of the temperature and an analysis of the urine is made, for which an extra dollar is added to the fee. It is presumptive that the older companies adopted this scale of fees as fairly adapted to the kind of business engaged in, and they have no trouble with their medical men.

We must consider that the average amount of policies is small, and the number of examinations very large. There is no difficulty in making ten to fifteen examinations a day, in addition to some private practice, though the usual number so far going to an examiner has been less, for only about one applicant out of five is examined. The average medical fee throughout the field paid by our company for industrial examinations is 70.7 cents, and for Sacramento 72 cents. In the ordinary department, as a rule, the fee is $5.

Let us now make some comparisons. The average amount of our ordinary policies is $2,164, with a ratio of $1 for examination to every $432.80 for insurance. In the industrial our average amount of policy is $189. Our rule is to examine all white adults applying for insurance of $200 and upwards, and all white children paying a premium more than 10 cents a week. Besides, colored persons of all ages and all white persons beyond their fiftieth year are examined. The amount of insurance varies from $17 to $1,000, according to age and weekly premium. For white persons the average amount of insurance in cases requiring examination is approximately $302, and for colored persons $106. As the whites are greatly in excess, it is estimated that the general average of insurance in cases examined is about $265. Allowing 71 cents as the average for examinations, we should have about $373 of insurance to $1 paid for examinations in the industrial department, while in the ordinary department the ratio is $432.80 to $1. It appears, therefore, that in the cases examined the medical fee is about 16 per cent. more in the industrial than in the ordinary department, in relation to amount of insurance.

The following is another comparison: In the ordinary department the medical fees equal 11.2 per cent. of the commissions paid to agents; while in the industrial they equal 13 per cent. of total commissions paid for securing the business, and very much more in cases examined, for only 22.3 per cent. of the whole number come under the doctor's inspection. At Sacramento 36.9 per cent. of all applicants have been examined. Therefore, we see that Sacramento business gives the medical examiner a fee somewhat above the average, and a percentage of work considerably above the average of other districts; at the same time Sacramento is the only place making any complaint about medical fees.

This is not the only instance in which medical men have made concessions from the usual fees, in order to promote great public utilities, aside from purely gratuitous services. In hospital service professional work has a much lower compensation than in private practice. In many instances young practitioners are glad to work for board and lodging, and to clothe themselves. Experience is the consideration.

I have nothing to say in justification of "society practice" for so much a head *per annum*. But I ask members to consider how large a fraction of their practice receives little or no pecuniary reward. Which one of you collects more than two-thirds of his bills? How many collect more than one-third, taking the fee bill as a basis? Now, take the young practitioner, with little or no private practice, and I quite agree with most of them that a respectable number of small fees, sure of collection without trouble or discount, is a great help, and is not to be despised; though their seniors, with a wealthy *clientèle*, large practice and generous fees, would disdain to touch the petty business.

I shall now give attention to some of the remarks made by various members of the Society in the discussion held April 27th. One speaker characterized industrial insurance as a "confidence game," "a bunco business." These terms imply deception and fraud. There are agents who use deception in the pursuit of business, but this practice is forbiden, and results surely in dismissal if continued. As to fraud on the part of any company engaged in this business, I have not heard of a single instance, and I challenge any evidence of it, either in their printed matter, or in their settlement of claims.

The assertion that "in 299 cases out of 300 they drop it in a short time" is wide of the truth, as the speaker should have known from his claimed experience. The usual lapse rate on policies is 50 per cent. during their first year; 16 per cent. the second; five per cent. the third; 3 per cent. the fourth, and thereafter 2 per cent. annually. It is somewhat larger in industrial than in ordinary life insurance, because there are fifty-two payments in a year, instead of one to four, and working people are more apt to run short of money than those in easy circumstances; but there is liberal provision for revival, and thus a large proportion return. This would not be the case were people deceived or dissatisfied. The millions of policies now in force over Europe and America, and the accelerating rate of new business prove that industrial insurance answers a general want. No fraudulent business could prosper like this for more than forty years.

Another speaker said, "It is an inducement for the babies to die." Statistics prove that the death rate of insured children is lower than that of children at large, therefore, especially less than that of the uninsured. Another said that "this insurance company must be pretty hard pressed as to its financial standing; I give this as the statement of some of the best insurance men in the State." Will he name one or more of his authorities? Will he give an instance of repudiation of its obligations? Are its shares below par in the market? or are they in the market at all? Has he heard of any offered for less than par? I have already said that the capital of the company is about to be doubled, and that no outsiders are needed to take the new shares. Moreover, its profits are divided with the policy-holders in both ordinary and industrial branches.

The same speaker added: "These baby companies have existed a long time, and if anybody will read the history of some of them in the city of London, they will be horrified. Murder after murder has been committed there to get the insurance." These crimes were totally imaginary. The charges have been investigated and found groundless, both in England and in this country. Had there been foundation for them the prohibitory legislation repeatedly asked would have been enacted. Another member remarked: "My faith in cheap insurance is shaken;" but he gives no reason for this. Are we to infer that people are liable to be cheated? No industrial company has failed so far. Besides, it is not *cheap* insurance, and cannot be, in proportion to the amount of the policy, for this business requires a much larger force to handle the same money value than ordinary life business.

Another speaker said of insurance companies: "They receive all the premiums they can get, and when a person dies they will pay what they agree, if they cannot get rid of it." Speaking for the Pacific Mutual, I reply that its contested losses, for nearly 30 years, have been less than one-half of 1 per cent. of claims paid; and this is about the average of all similar companies. What other class of claims is more honored? The last speaker closed with the remark: "I do not believe this Society can afford to recognize this form of insurance, which is so disastrous in its effects as a legitimate business." He did not attempt to show where the disaster falls, and I can only conjecture. Certainly not on the millions of policy-holders, or we should hear their complaints. The charges of child-murder have been disproved on investigation, and only the echo has reached our distant coast.

The action of the Society indicates its presumption that the business is disastrous to the medical profession at least, but we hear no complaints from any other quarter where our company has agencies. Moreover, we have not learned that similar action has been taken in any other medical body of the world with reference to industrial insurance. Throughout the East the position of Medical Examiner is sought after, and I have found no difficulty, even here in Sacramento, in finding competent medical men to do the work.

In communities where industrial insurance has been tried and approved, where it has been found to answer a general want among the millions who toil and live on weekly wages, no vindication is needed; that stage is passed. My object in addressing you on the subject has been to give you some true account of the business, and especially to remove wrong impressions of its nature by correcting gross misstatements of its working, at the same time giving some reasons why medical men should rather encourage than attempt to thwart a work which is of inestimable benefit to those who accept its protection. It is offered as a sound business proposition, without any pretense of charity,and those who accept it do so with the full understanding that they pay for what they get. and that they are entitled to share the profits which are reasonably to be expected from an experience of more than 40 years.

It now only remains for me to thank you for your attention, and to express the hope that you will hereafter have a better opinion of a work which has met greater difficulties than the present ones, has overcome stronger opposition than has here been manifested, has achieved greater success than any other mode of insurance, and has now a firm footing on our Pacific coast.

Sacramento and Montgomery streets.

MEMORANDA.

Edema of the Labia Majora as a Complication of Measles.

M. G——, 15 years of age, and of previous good health, was taken with a severe attack of measles, the temperature reaching 105° F. and pulse 120, with marked prostration. The case presented no peculiarities, however, until the third day of the eruption, when, in great alarm, the mother called my attention to a tumor of the privates, which, on examination, proved to be the labia majora, markedly edematous and swollen to the size of a hen's egg on either side. A mild astringent wash reduced them to a normal condition in two or three days, and the case went on to recovery without further complication.

SACRAMENTO, CAL. WALLACE A. BRIGGS.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M.D., Sacramento, Cal., and

WM. FITCH CHENEY, B.A., M.D., Adjunct to the Chair of Obstetrics and Diseases of Women and Children, Cooper Medical College, San Francisco, Cal.

The Superiority of Abdominal over Vaginal Hysterectomy.—DR. BYRON ROBINSON summarizes as follows: (1) Vaginal hysterectomy allows the most perfect known peritoneal drainage. (2) If the vaginal hysterectomy be done anatomically, *i. e.*, the two uterine and the two ovarian arteries be isolated and tied, the ureters will not be injured, and the procedure is one of the safest of all capital operations. We ligate the uterine and ovarian arteries with silk and place a clamp on each artery for 36 hours. This procedure enables the broad ligament to grow into the upper end of the vagina, and it elongates the vagina. (3) All the ligatures are outside of the peritoneal cavity, or can be removed. (4) There is little shock and rapid and complete convalescence. (5) In pelvic suppuration there is a minimum danger of sepsis from soiling the peritoneum. (6) A minimum amount of trauma is inflicted on the intestines and other viscera. (7) It is seldom followed by suture or mural abscesses, or by sinuses, following the use of drainage or infected ligature. (8) In vaginal hysterectomy time is not so important as in abdominal hysterectomy. (9) Vaginal hysterectomy is hard on the operator, but easy on the patient, while abdominal hysterectomy is the reverse. (10) So far as I can see vaginal hysterectomy does not weaken the pelvic floor. However, in certain cases partial prolapse of the vagina occurs. (11) The menopause seems easier when the uterus is entirely removed than when only part is removed. (12) Recovery after vaginal hysterectomy is much smoother. There is less vomiting, pain, and thirst than after removing the appendages through the abdomen. Thirst is due perhaps to congestion of the peritoneum after section. (13) Hernia is less frequent after vaginal hysterectomy than after removal of the appendages *per abdominem.* (14) Vaginal hysterectomy is the operation of choice in so-called hystero-epilepsy, where every vestige of genitals concerned in the menstrual rythm should be removed with almost entire safety. (15) Vaginal hysterectomy has low mortality, few post-operative complications, and a complete restoration to health in a vast majority of cases.—*American Gynecological and Obstetrical Journal*, October, 1897.

The Infant and its Earliest Management.—Some practical rules on this subject are laid down by DR. L. G. ARMSTRONG, of Boscobel, Wis. After birth the infant must be kept warm; it has come from a temperature of 98.6° F., and does not thrive with a sudden change to a temperature of 70°. During the first 24 hours give an infant absolutely no artificial food; babies never cry from hunger during this time, but often from thirst, therefore allow them a teaspoonful of boiled water from time to time. Careful hygienic management of the infant is much better than a course of highly scientific drug treatment.—*Pediatrics*, August 15, 1897.

SURGERY AND ANATOMY.

By T W. Huntington, B.A., M.D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal., and

Geo. B. Somers, M.D., San Francisco, Cal.

Three Points in the Management of Fracture at the Elbow.—(1) *Diagnosis:* Put your patient under anesthesia. Now apply an Esmarch elastic bandage, starting at the hand and going very slowly, but firmly, up the forearm, over the swollen elbow joint, and so on until the arm-pit is reached. Leave the bandage on for about fifteen minutes. Then remove it, beginning at the hand, but leaving the final four turns upon the upper arm still tightly in place. The elbow thus exposed will be pale, bloodless, and no longer swollen. All the congestion and edema are for the time being gone. The diagnosis can now be made with comparative ease. If there is a dislocation, it is reduced; if a fracture, it is set. Now the remaining turns of the Esmarch bandage are removed, and, of course, the swelling thereupon promptly comes back; but the surgeon has accomplished his purpose. (2) *Position:* Dr. John B. Roberts recently sent inquiries to the surgical societies of New York, Boston, and Philadelphia, regarding the question, among others, what position is best, in treating this fracture? The majority recommended the semi-flexed, or, practically, right angle posture. A minority, but containing famous surgeons too, counselled extension, with supination, maintained during all the time of healing. It seems to the writer that, whereas, in the ordinary case, with no great displacement upward of the condylar and trochlear fragment, the semi-flexed position is the best one; when, on the other hand, we meet with the ''gunstock deformity'' class of cases, we cannot do better than to adopt an ingenious suggestion of Dr. Charles A. Powers, which is to combine both postures; using first, for one week, extension and supination, and then assuming the semi-flexed position, which is maintained for the rest of the time. (3) *Passive motion:* The orthodox doctrine has been to use passive motion only in fractures of joints. At the present time a majority are of the opinion that motion, either passive or active, during the knitting process is prejudicial to the best results. It violates that cardinal rule of surgery, rest, absolute quietude for an injured part.—Robert H. M. Dawbarn, in the *New York Polyclinic*, July 15, 1897.

Antistreptococcus Serum.—Among other objections to the use of this serum in septic cases, Hirst names the following: It is difficult to procure a thoroughly reliable preparation of the serum. Any one who has read Marmorek's article in the *Annals of the Pasteur Institute*, must be struck with the great care required in the production of this serum and the necessity for a high degree of skill and conscientiousness in the work. I feel quite certain that some of the preparations on the market are not prepared in a satisfactory manner, and I for one should not be willing to use an antistreptococcus serum simply because it bore this label on the bottle and without knowing exactly how it had been prepared.—*Medical and Surgical Reporter*, July 31, 1897.

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

The Operative Treatment of Myopia of High Degree.—DR. M. HORI gives the history of cataract operation in high myopia and detailed description of 15 of the 28 cases which had been operated upon in Schweigger's clinic. Schweigger's indications for the operation are as follows: The far point of the eye must be at 7 cm. or less; corrected vision must be at least $\frac{6}{36}$; there must be no inflammatory intraocular complications, and the macular changes in the choroid must not be very extensive. The younger the patient the better. It is better as a rule to operate upon one eye only, and preferably the more myopic eye. After the operation the aphakic is used for distant vision, and the other is corrected for near vision. A free discission is done under antiseptic precautions, the patient is put to bed for at least two days, and atropine is used for the first day. If the eye remains free from irritation the lens may be allowed to undergo complete absorption, which requires about six months. If the lens swells rapidly and there are symptoms of irritation or increased tension, a linear incision 2 or 3 mm. above the lower margin of the cornea made, and the hard parts of the lens are pressed out. Soft cortical masses may be left to undergo absorption. Finally a needle operation may be required for the secondary cataract.—*Archives for Ophthalmology.*

The Subjective Color-Perceptions Caused by the Action of Certain Toxic Substances.—DR. RICHARD HILBERT says the knowledge that certain substances caused colored vision has existed for a long time. Szokalski, in 1842, used the term erythropia to describe the condition produced by the use of the seeds of hyoscyamus niger. Atropine and hyoscyamine have been known to produce similar symptoms. Santonin frequently causes objects to appear of a yellow-green color. The author found that the ingestion of 0.3 of picric acid produced slight yellow vision in two minutes, which lasted two hours. This was followed by blue or violet vision. Xanthopia has been noticed after the external use of chromic acid solution and in icterus. Violet vision has been noticed once in Japan from the toxic effect of an unidentified microbe. The author recently observed two cases of chromatopsia following drug intoxication. The first saw all objects scarlet-red after instilling 6 drops of a ½ per cent. solution of duboisin. The effect passed off in half an hour. The second was a 6-year old child who took 0.12 grammes of santonin. It caused all objects to appear grass-green. It is evident that santonin has different effects with different people. In many it causes yellow vision, in others yellow-green vision, while in others it produces the sensation of green.—*Archives of Ophthalmology.*

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

The Operative Treatment of Enlarged Prostate.—ERDBERG (*St Petersburg med. Woch.*), reports a successful case of bilateral resection of the vas deferens for the relief of severe urinary trouble due to hypertrophy of the prostate. In discussing the operative treatment of this disease, he points out that castration is not free from danger, and in about one-third of the cases fails to give any good result. Resection of the vas deferens is preferred to castration, on the following grounds: (1) The former is a less serious operation, and does not necessitate the administration of an anesthetic or prolonged rest in bed. (2) It is less likely to cause any mental depression, as the visible signs of manhood, though deprived of their function, are still retained. (3) Castration may be subsequently practised, although in the author's opinion it is not likely to do good after resection has failed. Relief is more speedily attained by castration, but this, the author holds, is no good reason why the more serious operation should be preferred to resection of the vas deferens.—*British Medical Journal*, September 25, 1897.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M.A., M.B., C.M., Professor of Clinical Medicine, University of California, San Francisco.

Treatment of Diabetic Coma.—LEPINE records the results of intravenous injections in a case of diabetic coma. The patient regained consciousness for several hours. Before the onset of coma the urine gave a marked reaction with perchloride of iron; no albumin was present; 9 to 10 litres of urine were passed daily, and the amount of sugar was 48 to 55 gm. per litre. The first symptom of coma was deep respiration. Sodium bicarbonate (25 gm. in the 24 hours) was prescribed. The eyes were closed, the pupils were contracted; the respirations were 28 per minute, and very deep. The breath had the characteristic odor of acetone. The pulse was very feeble, and the pulse beats 124 per minute. The temperature was subnormal. A solution was prepared consisting of 7 gm. of chloride of sodium and 10 gm. of bicarbonate of soda, dissolved in 1 litre of sterilized water. Two litres of this solution, at a temperature of 38 C., were injected into a vein of the arm in less than quarter of an hour. Whilst the fluid was being injected the pulse became stronger, the respiration less deep, and the patient opened his eyes. and asked for drink; 50 gm. of bicarbonate of soda dissolved in water and wine were given to him in the course of a few hours. Four hours after the injection the patient still remained conscious. The urine was very pale and scanty. Three hours afterwards the patient became unconscious. After the coma had continued eight hours death occurred. In the case recorded the patient took altogether 90 gm. of bicarbonate of soda by the mouth, and 20 gm. were given by intravenous injection. The urine remained very acid in spite of the great quantity of alkali taken. In another communication Lepine states that he has never known any case of diabetic coma recover. In order to have any prospect of success he thinks that the injection of alkaline fluids ought to be made before the patient becomes comatose, that is, when the prodromal dyspnea first occurs. He records two cases in which early injections were made. The first case was that of a boy, aged 16, who suffered from a very severe form of diabetes. The urine gave an intense reaction with perchloride of iron. Large doses of bicarbonate of soda internally produced no effect. As the condition was becoming worse, 2 litres of the above mentioned saline solution were injected beneath the skin of the abdomen. The condition of the urine remained practically the same; no improvement occurred; symptoms of commencing coma appeared, and the patient was removed from hospital by his parents. Another case was that of a man, aged 37, who also suffered from a severe form of the disease. Whilst under treatment the aceto-acetic reaction appeared in the urine, and the general condition became much worse. He became restless, and a marked augmentation of the respiratory movements was noticed. An intravenous injection of the saline solution was made. After the injection the urine increased slightly, and at least three times the quantity of acetone, aceto-acetic acid, and oxybutyric acid was excreted. Thus the injection caused abundant elimination of these toxic substances. Next day there was improvement of the general condition and diminution of the quantity of urine excreted. Twenty-nine days later the patient was shown at the Lyon Medical Society, the improvement having continued.—*British Medical Journal*, May 8, 1897.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M.D., Professor of Pathology, Cooper Medical College, San Francisco.

The Roentgen Rays in Infectious Processes and in Diagnosis.—That the rays possess the power of affecting living tissues cannot be doubted after the many cases that have been published of dermatitis, and even periostitis following exposure. With regard to their effect on pathogenic microörganisms, SYDNEY ROWLAND quotes from different sources. SROMAIN has established that the X-rays, acting for even considerable periods of time in cultures *in vitro*, do not exercise any recognizable effect. Similar results have been attained in England by DR. BLAIKIE. On the other hand, the researches of LORTET and GENOUD have tended to show that the rays acting on experimental animals, retard in a remarkable manner the development of tuberculous infection, and more recently FORENTANI and LINASCHI have come to the same conclusions. In these experiments, guinea pigs were inoculated intraperitoneally with an emulsion in broth, of virulent tubercle, animals similar in all other respects being kept for control purposes. In each experiment an animal was exposed to the source of the rays, at a distance of 10 to 20 cm. in such a position that the rays traversed the seat of inoculation. At the necropsy all the animals were found to be tuberculous, but in varying degrees, those that had been exposed to the rays showing fewer tubercles than those that developed in animals not so exposed, and these, moreover, further from the point of inoculation, which was also the point of maximum exposure. In a second series, similar results were obtained, with the remarkable effect in one case of the subsidence of the nodule that had formed at the seat of inoculation after repeated exposures. No explanation can at present be offered of these remarkable effects. The authors suggest that possibly the passage of the radiations through the tissues cause an aggregation of phagocytes to the seat of inoculation, or some special endowment of resisting power to the tissues themselves, as the result of exposure. M. RENDU and DU CASTEL report a truly remarkable case, which cannot but be received with great caution. A young man aged 20 years, suffering apparently from acute pneumonia, was in so serious a condition, that his life was despaired of. As a last resort, the curative effects of exposure to a Crookes' tube was tried, with the result that on the third day of the treatment his condition was markedly improved, and he passed the night without fever. This improvement continued and the patient ultimately recovered. As the authors confess they were not certain of the diagnosis, and admit the possibility of coincidence, which, however, they do not think probable, this case is clearly open to very serious doubt. In diagnosis there is a large field of general utility. BOUCHARD reports 3 cases of pleural effusions. He found that the chest occupied by the fluid, gave a darker shadow than did the healthy side. It was possible to define the upper limit of the fluid by the same means The displacement of the mediastinum laterally could also be made out. LEVY-DORN took the opportunity of examining with the screen the chest of a patient suffering from chronic bronchitis and asthma. He observed that the left half of the diaphragm fell rapidly at each inspiration, and rose slowly and by successive stages. The right half, on the other hand, remained from the first absolutely fixed in the position of extreme inspiration, only to rise at the termination of the attack with the expectoration of viscid mucus. These results suggest that the screen is a valuable addition to our present means of physical examination, which, however, it cannot replace or equal for rapidity and ease of application.—*British Medical Journal*, June 12, 1897.

CHAPTELOUBLE, DESCOMPS and RONILLIS detail the case of a woman aged 22, who was afflicted with an acute, rapidly spreading pulmonary tuberculosis. The right apex contained a cavity and the entire right lung was infiltrated with diffused extension to the left lung. The sputa contained a very large number of tubercle bacilli. Medical treatment was without effect. The Roentgen rays were used. During the first two weeks of their use, the general condition became aggravated. During the following month, cough and expectoration disappeared, and tubercle bacilli became almost absent from the sputum. At the same time, the general condition continued grave and ulcers appeared on the exposed parts. The use of the rays was now discontinued, and during the next three weeks the patient became greatly improved. All the symptoms had disappeared with the exception of an evening rise of temperature (101° F.), which the authors explain as being provoked by bacillary infection in some part of the body other than the lungs. While this case is not reported as a permanent cure, they comment favorably on the action of the rays in pulmonary tuberculosis.—*Archives d' Electrisité Médicale*, May 3, 1897.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M.D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

The Role of Auto-Toxis in the Production of Insanity.—DR. ALLEN MCLANE HAMILTON, of New York, presented a contribution on this subject at a general meeting of the Medical Society of London held on May 11th of this year. He had conducted clinical observations and experiments on animals to determine whether there was any specific or noso-toxicity of the urine of the insane, and if so, its nature; to discover how important and general was the theory of uric acid poisoning, and whether mental disorders were produced and modified by an auto-toxemia, whether the offending substances were the leucomains or the intrinsic products of putrescence in the intestines. Dr. Hamilton arrives at the following conclusions: (1) Urines rich in indican contained very little or no preformed sulphuric acid, and were toxic. (2) When the sulphate ratio is materially changed it probably indicates auto-toxis, in connection with an increased amount of combined or etherial sulphates. (3) Such indications were generally found with acute insanities in which rapidly developing symptoms occur. (4) Changing illusions and hallucinations, unsystematized delusions, confusion with verbigeration in connection with insomnia, pallor, intestinal indigestion, constipation, and rapid exhaustion are due to auto-toxis. (5) Paranoiac states, or those in which concepts are the features, chronic stuporous conditions and certain forms of dementia have little to do with the formation of intestinal products of putrefaction. (6) Various post-febrile, traumatic, alcoholic, or drug insanities are those in which auto-toxis is most constant. (7) Variations in excretion of combined sulphates keep pace with the changes in the progress of an established insanity, epileptiform attacks being directly connected with putrefactive processes. (8) The most successful treatment consists in lavage, intestinal irrigations, gastric and intestinal antisepsis, by means of hydrochloric acid, borax, salicylate of sodium, charcoal, guaiacol, or naphthalin in small and repeated doses, and the administration of a combination of the red marrow from the small bones, blood, and glycerine.—*Dublin Journal of Medical Science*, June, 1897.

FORMULÆ.

By H. E. SANDERSON, Ph.B., M.D., Assistant Physician State Asylum for Insane, Stockton, Cal.

Acne Rosaceæ.—Oil of turpentine has been found efficacious The discovery was accidentally made a short time ago.—*New York Medical Journal.—St. Louis Medical and Surgical Journal.*

Obstinate Spasmodic Cough in Adults:

Bromoform	gm. 10.0
Tinct, gelsemii semper.	gm. 5.0
Syrupi lactucarii	gm. 120.0
Pulv. gum Arabic, q. s.	

Sig.—Two teaspoonfuls every four hours.—*Ex.*

Gastro-Intestinal Catarrh in Infants.—DR. WELLS (*Phila. Polyclinic*) advises the following for its quieting effect:

Sulphonal	gm. 0.5
Sodii bromid.	gm. 2.0
Spts. menth. pip.	gm. 10.0
Aquæ camphoræ	gm. 60.0
q. s. ad.	

Sig.—Teaspoonful every 2 to 3 hours.—*Practitioner.—North Carolina Medical Journal.*

Sciatica.—Inject deeply, near the nerve, 1 to 4 c.cm. of the following:

Sodii glycero-phosphat.	gm. 5.0
Aquæ distilat.	gm. 20.0

—*Gaz. des Hôp.—Medical Record.*

Nervous Hyperacidity of the Stomach.—EINHORN recommends:

Strontii bromidi	ʒ iii
Aquæ menth. pip.	ʒ xv

Sig.—Teaspoonful twice a day, in milk, at meal time.—*Medical News.*

Rapid Cure for Pemphigus.—OHMANN-DUMESNIL reports the cure of two cases of obstinate pemphigus by the following:

Internally:

Acidi arseniosi	gr. $\frac{1}{20}$
Pulv. piper. nig.	gr. iss
Ext. gentian	q. s.—M.
ft. pil. No. 1.	

Sig.—One after each meal.

Externally:

Campho-phenique ointment, 6 per cent —*St. Louis Medical and Surgical Journal.—Medical News.*

METEOROLOGY.

Summary for September, 1897.—*Temperature.*—The normal temperature of the State for September is 69.8°; the average for September, 1897, was 67.7°, a departure from the normal of -2.9°; the highest monthly mean was 99.0°, at Salton; the lowest 46.4°, at Bodie. The maximum temperature was 117°, at Salton, on the 24th. The minimum, 10°, at Sneddin's Ranch, on the 12th. The absolute range for the State was 107°. The greatest monthly range was 68°, at Sneddin's Ranch; the least, 24°, at Coronado.

Rainfall.—The normal precipitation for the State for September is 0.22 inches; the average for September, 1897, was 0.33 inches, a departure from the normal of +0.11 inches. The greatest monthly precipitation was 2.50 inches, at Crescent City Light; the least, nothing, at various places.

Wind.—The prevailing direction of wind was west.

Unusual Features.—Thunder storms on the 25th in Sierras and mountains of Southern California. Frequent showers in Northern California as early as September 2d.—W. H. HAMMOND, Director State Weather Service.

California—Tabular Statement for September, 1897.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean...........	Highest	Lowest....	Mean Highest............	Mean Lowest.......... ..	Mean Daily Range.........	No of Days Rain Fell......	Total Rainfall...........		No. of Clear Days....	No. of Fair Days...........	No. of Cloudy Days...........	Prevailing Direction.	
Auburn ....Cal.	67.8	88	42	------	------	------	1	0.20	------	16	13	1	N.E.	Southern Pacific Company.
Berkeley......... "	62.6	89	48	70.1	55.1	15.0	3	0.20	86.1	13	11	6	S.	Obs. University of California.
Colfax............ "	64.0	92	50	------	------	------	1	T	------	20	9	1	S.	Southern Pacific Company.
Coronado........ "	------	------	------	------	------	------	------	------	------	------	------	------	------	H. A. Masac.
Eureka........... "	55.2	82	45	61.4	49.1	11.3	9	1.05	------	11	11	8	N.W.	Weather Bureau Dept. Agr.
Fresno........... "	72.8	98	47	88.3	57.3	31.0	3	T	41.0	24	5	1	N.W.	" " "
Keeler .... "	59.9	106	64	------	------	------	1	0.14	------	11	15	4	S.	California and Nevada R. R.
Los Angeles.... "	70.0	97	52	82.0	59.0	23.0	0	0.00	76.0	10	20	0	W.	" " "
Monterey .... "	60.1	79	48	------	------	------	2	0.12	------	13	10	7	S.	Southern Pacific Company.
Napa........... .. "	65.6	100	39	81.5	49.6	31.9	3	0.26	77.0	15	12	3	S.W.	Station Napa Insane Asylum.
Oakland .... "	63.0	88	49	71.7	54.2	17.5	6	0.16	83.0	11	14	5	W.	Chabot Observatory.
Paso Robles.... "	66.5	93	42	81.4	51.6	29.8	2	0.03	------	27	1	2	N.W.	Agr. Experimental Station.
Red Bluff....... "	73.0	99	47	85.0	60.0	25.0	6	0.03	39.0	22	7	1	S.E.	Weather Bureau Dept. Agr.
Sacramento..... "	69.6	97	48	83.2	56.0	27.2	3	0.16	54.0	21	7	2	S.W.	" " "
San Bernardino "	71.3	99	44	88.3	54.3	34.0	2	0.13	------	20	10	0	W.	A. K. Johnson, M. D.
San Diego. ..... "	68.1	83	58	73.0	63.2	9.8	1	T	77.0	28	1	1	N.W.	Weather Bureau Dept. Agr.
San Francisco.. "	60.8	92	50	67.5	54.1	13.5	2	0.10	81.0	16	10	4	W.	" " "
Santa Barbara.. "	67.0	93	52	75.3	58.6	16.7	0	0.00	75.0	24	4	1	W.	Hugh D. Vail.
Santa Cruz...... "	62.1	93	39	77.1	47.1	30.0	1	0.17	------	11	18	2	N.W.	Ralph Springer.
Yuma...........A. T.	89.3	106	69	------	------	------	3	0.18	------	24	6	0	N.W.	Southern Pacific Company.

Blank (---) indicates data missing.

Occidental Medical Times.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: NOVEMBER, 1897

SAN JOAQUIN VALLEY MEDICAL SOCIETY.

The second semi-annual meeting of the San Joaquin Valley Medical Society was held at Bakersfield on Tuesday, October 12th. The proceedings throughout were of an interesting and practical character. The address by the President, DR. W. N. SHERMAN, of Merced, which appears elsewhere in this issue, deserves the careful attention of every general practitioner. The President has not hesitated to express himself vigorously and fearlessly regarding many of the evils with which the great body of physicians have to contend. The struggle for existence is, each year, becoming keener and keener, and that even existence may be maintained, demands the elimination of many abuses that now crowd hard upon the protession.

The influence of the approaching meeting of the State Society at Fresno, which is the center of the territory of the District Society, was very apparent, and unusual efforts have been made in the direction of a thorough organization of the profession in the more southern counties. As a result of this, the Kern County Medical Society was organized during the meeting, and no doubt remaining counties will come into line at an early date. This movement demonstrates two important facts: First, the healthy influence upon professional organization of the District Society. Second, the stimulation which is afforded by a meeting of the State organization in a new section.

The Society has voted to hold every alternate meeting in Fresno, which, as at present arranged, will give that city a monopoly of the annual meetings. This, we believe, would have been better arranged as a tacit understanding, rather than as a fixed rule. The annual meetings of the District Society should certainly be held in the large centers of population, but it would be well, even now, to occasionally hold an annual meeting outside the city of Fresno, and thus avoid even the appearance of centralization.

The Society, on motion of Dr. A. J. Pedlar, of Fresno, who, it will be remembered, was a member of the upper house at the last session of the Legislature, adopted a strong resolution in regard to compensation for medical expert testimony. In order, however, to give force to resolutions of this kind, something more than the mere coöperation of medical societies will be required. The real remedy for the needs of the profession is the presence, in each House, of a fair representation. A few intelligent physicians in the Senate and Assembly, for one session, would insure the passage of any reasonable legislative measures to remove the disabilities under which the profession now labors.

THE MEDICAL SOCIETY OF SANTA CLARA COUNTY AND QUACKERY.

At a meeting of the Santa Clara County Medical Society held November 3, 1897, a series of preambles and resolutions, which in substance are as follows, were adopted by a vote of 17 to 7, at an unusually full meeting:

Whereas, It is known to the members of this Society, and should be known to all intelligent persons, that there is nothing in this preamble or the following resolution, or in the code of ethics of this Society, or presumably in the code of ethics of any society of regular physicians in the world, that precludes its members from freely rendering most prompt and efficient assistance to the sick, the injured, or the suffering, and obtaining the history of such cases from all available sources, whether previously attended by homeopathic or eclectic practitioners, or unlicensed fraudulent pretenders; the right to change physicians being unquestionable; or from receiving in emergencies needed assistance and advice from persons, whatever their titles or pretensions; nor do such codes of ethics preclude regular physicians from seeing or visiting the sick or injured while attended by homeopaths or eclectics or unlicensed persons, and freely stating their opinions about diagnosis and treatment, and doing all else required by humanity and friendship, but they do preclude their representing or regarding such visits and attendance as professional consultations or agreements, or personally receiving professional pay therefor, as lowering the character and standing of the medical profession and misleading the sick and their friends and the community.

Whereas, The medical profession requires before admission to membership years of study, a good moral character and satisfactory proof of a reasonable knowledge of the science of medicine and its allied branches; and has no exclusive dogmas, schools, or sects, but is universal; embracing the accumulated knowledge and progress concerning all known remedies, plans and principles for the treatment and prevention of human ailments, and necessarily including all that is true that can possibly be known or practised by the so-called homeopathic or eclectic schools or sects in medicine whose fundamental dogmas are unchanged, and that exist solely for the benefit of their real or pretended practitioners; and,

WHEREAS, The wise and beneficent ethical provisions of the American Medical Association, and of this Society, are to conserve the honor and standing of the medical profession, and, by establishing a plain line of demarkation, to protect the community and our neighbors and friends, whose interests are identical with our own, from misconception of the professional character, education and standing of licensed real or pretended practitioners of the aforesaid schools or sects in medicine, and unlicensed persons fraudulently claiming to be physicians.

Resolved, That this Society readopts for its government the code of ethics of the American Medical Association, as defined in the preceding extracts therefrom, and the preceding preamble, and holds all its members in honor bound to adhere to its provisions.

This action appears to have had a salutary effect not only in the Society but also upon the profession, as there have been three resignations and nine applications for membership, while several other candidates are expected in the near future.

The opponents of the resolutions, for there were a number offered at the meeting, appear, according to the daily papers, to whom, presumably, information was furnished by members interested, to have fallen into a rather serious error. It is stated in the San Jose *Mercury* of October 25th that at the San Francisco meeting of the American Medical Association the minority report on revision of the code of ethics was "laid on the table by the decisive vote of 135 to 30." This, while literally true, is absolutely incorrect as showing the temper of the Association at that meeting, or the strength of the possible vote, had one been taken on the main question. The consideration of the revision of the code was taken up at the general session of the Association, on the fourth day, and with the largest audience present at any session. On the day before, when the revision of the constitution was under consideration, the substitution of the minority for the majority report was ordered by a vote of 160 to 70. There is not the least doubt in the world that, had the supporters of the minority report on revision of the code only the courage of their convictions, and had they presented a motion for its adoption, that motion would have been carried by a vote of not less than 200, and possibly by even more, which would have insured its adoption by an overwhelming majority.

If any members of the Santa Clara County Medical Society, an organization of the regular profession, in affiliation with the State Society, and therefore with the American Medical Association, have been guilty of fostering quackery, or of consulting with charlatans, the Society has acted wisely in taking stringent measures to free itself from such association. It is impossible to conceive, as we have frequently pointed out, upon what basis of theory or fact, logic or truth, science or professional honesty, any member of the regular profession can consult with a sectarian physician, or one holding an exclusive dogma under which he professes to practise medicine. Under these circumstances there can, of course, be no professional consultation that would be of any benefit to the patient. On the other hand, if the sectarian physician, while loudly professing, for commercial reasons, his adherence to a particular cult, at no time hesitates to avail himself, according to his education, of the opportunities that regular medicine presents, he is certainly a swindler and a fraud, and, as such, is unsuited for professional association.

The plea often made that the needs of suffering humanity demand such unholy affiliation is as false as it is feeble. No physician would hesitate, in a great emergency, such as an accident on the street, to help any person, however ignorant of medicine or surgery, who, while endeavoring to relieve suffering, might need assistance. This comparatively rare occurrence is, however, the only one in which such a plea could be justifiably raised. Under all other circumstances, to support, encourage or in any way assist in maintaining the attendance of any pretender upon the sick, is the grossest outrage upon suffering humanity that could possibly be contemplated. We can hardly do better in this connection than to recall to the minds of our readers the concluding words of DR. H. D. DIDAMA, of Syracuse, when presenting the minority report of the committee on revision of the code to the American Medical Association at the San Francisco meeting:

"Some of you of your own free will and accord and as loyal representatives of State societies, which have spoken with no uncertain sound, undoubtedly hold the opinion that legality and fitness are not interchangeable terms. Notwithstanding the ingenious arguments of the eminent gentlemen who constitute the majority committee, you are not convinced that consultations of regular physicians with irregular practitioners are proper or beneficial to the patient. The irregular may be honest and sincere. He may have received a collegiate education. He may be a pillar in the church. He may thoroughly know anatomy and chemistry and biology. He may be able to speak with the persuasive tongue of eloquent men and of angels. And yet if he, by ignoring or rejecting the rational materia medica and therapeutics, upheld by all regular physicians throughout the world, and professing to be governed in his practice by a metaphysical dogma, demonstrates that he and the regular doctor have absolutely nothing of any practical importance in common, some of you steadfastly believe that a pretended consultation in these circumstances would be, even if the patient desired it, an imposition and a swindle which no sophistry can rectify, no plea of liberality palliate, no fee recompense or excuse."

These words will live for many years, and they will lose none of their force nor truthfulness with the lapse of time.

OXYTUBERCULINE.

In these days of therapeutic exploitation and far-reaching experimental research, the announcement of a new remedy in the treatment of disease is an every day occurrence. Many of these methods, like many of the new remedies, are comparatively valueless, and are not in any sense advances upon older and tried procedures. Others contain some elements of usefulness, and yet a few are genuine advances and real boons to suffering humanity. When a new method is put forth, as applicable to a wide-spread disease, it is naturally received with a good deal of interest, and if this disease be one that is very generally fatal, a remedy that is asserted to be curative, in many cases, will, properly, meet with the closest scrutiny. This, we believe, is the situation in medical therapeutics to-day, and it is also the attitude of the profession. But while scrutinizing closely, it must be recognized that the value, or otherwise, of a new remedy can only be determined by careful and prolonged experiment at the hands of those who are willing to give the remedy a fair trial. In this matter of experimental research, one of the first questions to be considered is, granted that the remedy be found of any service in the particular disease, will it be harmful in its influence upon the patient already in a critical condition. With this question answered in the negative, the way is certainly clear for any intelligent and conscientious physician to exercise his best judgment. We have endeavored here to indicate the spirit that should properly animate the modern physician, and we have done so because there appears to be, right here in California, an instance that demands a more judicial attitude on the part of some members of the profession, and a more careful scrutiny on the part of many others, than it has so far received.

In November, 1896, DR. J. O. HIRSCHFELDER, of San Francisco, announced to the profession the result of his investigations upon "A New Method of Treatment of Tuberculosis and Other Infectious Diseases" [*vide* MEDICAL TIMES, vol. x, p. 682]. In this provisional report, for such it was, the author indicated the steps that he had taken in working out his theory, showing that this had been evolved, not from therapeutic results, but that it had a biological foundation. The following description of the method of preparation of the so-called "oxytuberculine" was there given, and enough added to definitely settle the two important points to which we have already alluded: (1) That favorable results had been obtained in some cases. (2) That injurious consequences had not been noted. At that date DR. HIRSCHFELDER stated he had been using the new agent therapeutically since October, 1895, and that, to his knowledge, no patient had been injured by its use. He said: "Every physician has seen tuberculosis cured, but it has never before been my good fortune to witness such rapid changes as have taken place in several cases treated by this method; cases which have been examined by other physicians both before and during the treatment." He urged "that provisionally, only early cases be treated in which there is no development of cavities in the lungs, and in which the fever is slight and the constitutional symptoms such that a return to health may reasonably be expected;" and added: "for the present, however, it would be unwise to expect miraculous cures of patients in the last stages of consumption." So far DR. HIRSCHFELDER'S position must be considered as above criticism. A clear, complete and truthful publication of the origin, constituents and process of manufacture of the new remedy was given, and there placed upon permanent record for all who might desire to avail themselves of it. A demand for the new agent promptly followed, and to meet this its manufacture, on a limited scale, was begun and has since continued.

DR. HIRSCHFELDER subsequently published elsewhere a further elaboration of his theory and of his experience, and at a later date presented to the State Society, in San Francisco, the results that he had obtained in some cases. On this particular occasion it is unfortunate that a number of circumstances conspired to produce hostile and bitter criticism, and to engender a spirit which was not helpful to the cause of scientific investigation. More recently DR. HIRSCHFELDER has been again attacked; a circumstance which, however, should not disturb him, as his is but the common lot of pioneers in any new field.

Our purpose now is merely to place the subject calmly and squarely before the profession, at home, that they may not adopt an attitude which ill becomes the spirit of scientific medicine. If oxytuberculine or its underlying principle be worthless as a therapeutic, agent it will, in the process of time, find its place with other discarded and discredited methods and remedies. It must also be apparent that the sooner it is helped to this limbo of oblivion the better for all concerned. On the other hand, if it constitutes a positive, though slight advance in the treatment of a wide-spread and generally fatal disease, it would be the height of folly to allow either prejudice or indifference to tie our hands.

It has been charged that oxytuberculine, as such, is not a new discovery or even a new product, but that it is really identical with KOCH's "new tuberculine." As we understand the matter, it differs very widely from the new and from the old product which was originally used as its base. The principle involved is an entirely new one. It is based upon the idea that in the body the poisons secreted by the germs, are neutralized by the results of their oxydation, and that the germs themselves are killed by the oxytoxines so produced. This is an entirely new explanation of immunity and of the spontaneous cure of infectious diseases. In order to apply this theory in therapeutics, it is necessary, first, to obtain the poison outside of the body and then oxydize it, so that the oxydized poison could be used in the treatment of the disease. In the preparation of oxytuberculine this principle is followed. A tuberculine is prepared in the same manner as the old tuberculine of KOCH. This is then oxydized by heating with peroxide of hydrogen (hydrozone). Some have maintained that the peroxide of hydrogen could not persist in tuberculine, for the latter they presumed to be alkaline. Any one who has worked with tubercle bacilli knows that in the growth of that organism an acid develops, and it is on account of that acidity that the germs stop growing. If the culture fluid be rendered alkaline the growth will be resumed. As for the statement that KOCH's new tuberculine is oxydized, this would appear to be erroneous, judging from his rather meager discription of the process in the *Deutsche med. Wochenschrift* of April 1, 1897. There he distinctly states that the pulverized living bacilli are centrifugalized with water and divided into two layers: the upper, which has all the properties of the old tuberculine, and which he throws away, and the lower, from which he makes his new tuberculine R, though he does not give the details of the procedure.

Neither DR. HIRSCHFELDER nor his method demand defense, and we do not wish to be considered as offering anything of the kind. It is, however, proper that we should state our entire conviction of his sincerity in the principles which he has laid down and the method that he advocates. It is within our knowledge that he has spent a large amount of money upon an investigation which he has very fully equipped himself to conduct. It is also a fact that he has devoted the greater portion of his time to this work. If, then, oxytuberculine proves a failure, he must at least receive the credit of having endeavored, in a very substantial way, to contribute his mite to the sum of human knowledge. On the other hand, if the principle which he has advanced be true and if his method, as applied, has been sufficiently worked out to achieve an enviable measure of success, he has accomplished that which will give him a reputation now, and a name in later years that will live long after the memories of hostile criticism or the names of critics shall have passed into oblivion.

NOTES.

California Northern District Medical Society.

The seventh annual meeting of the California Northern District Medical Society will be held in Pythian Hall, Third and Commercial streets, Chico, Cal., on Tuesday, November 9, 1897. There will be three sessions—a morning session commencing at 10 o'clock, an afternoon session at 2, and an evening session at 7:30, after which a banquet will be tendered the visitors by the local profession. The following are the titles of the papers, with the names of their authors, and the names of those who will open the discussions: "Annual Address" by the President, John Fife, of Red Bluff; "Tuberculous Myelitis Affecting the Long Bones," T. W. Huntington, Sacramento; G. A. White, Sacramento. "Spina Bifida, with a Report of a Case," H. D. Lawhead, Woodland; David Powell, Marysville. "Congenital Malformations of the Anus and Rectum, with a Report of Two Cases," R. F. Rooney, Auburn; Wallace A. Briggs, Sacramento. "Autoinfection," B. M. Gill, Dunsmuir; B. Caldwell, Biggs. "The Eye Symptoms in Tabes Dorsalis," Wm. Ellery Briggs, Sacramento; Thos. Ross, Sacramento. "Myalgia and Rheumatism," E. B. Robertson, Jackson; J. H. Barr, Marysville. "Phthisis Pulmonalis," J. Ellis Rodley, Chico; James H. Parkinson, Sacramento.

Two Cases of Typhus Fever in San Francisco.

On October 10th, a case of typhus fever was reported from St. Luke's Hospital to the San Francisco Board of Health. The patient was named Edgar Miller, aged 23, an employe of the Union Iron Works, and residing in the vicinity of the works, in the Potrero. He was first seen by a neighboring physician, who treated him for two days, and then, as the case seemed puzzling and rapidly grew worse, ordered him transferred to St. Luke's Hospital. Under the care of Dr. Washington Dodge, the diagnosis of typhus fever was made. On being reported to the Health Officer, the case was removed to the Twenty-sixth Street Hospital. One of the internes of the City and County Hospital, Dr. A. H. Giannini, volunteered to care for the case, and a nurse was detailed to assist. Death occurred October 17th. An autopsy was made by Dr. J. C. Spencer, the city bacteriologist, assisted by Dr. W. G. Hay. The report of the *post-mortem* examination confirmed the diagnosis. As a sequel to the case, Dr. Giannini became sick a few days after the patient's death, but rapidly recovered without any serious symptoms developing. The nurse, Hawkins, was also taken sick on the ninth day after exposure, and became gradually worse. The first diagnosis made was typhoid fever; but later a faint purplish macular rash appeared on the abdomen and inner, outer, and anterior surfaces of the thighs. This rash resembled that of Miller's, but was by no means so marked. The temperature averaged about 102.5° F., but as the patient was receiving guaiacol, may have been kept down by this antipyretic. The other symptoms were milder than in the first case. A number of San Francisco physicians examined both cases, but are not agreed as to the diagnosis, since the symptoms do not seem to be typical. As to these being isolated cases, Dr. Felipe Martinez is said to have reported two cases within the last two or three years, but that the diagnosis was not accepted by the Board of Health, and was subsequently changed to typhoid. Dr. Martinez maintains that he could not have been mistaken, as he had had considerable experience with the disease in Central America.

SPECIAL ARTICLES.

REPORT OF A COMMITTEE OF THE FACULTY OF COOPER MEDICAL COLLEGE, UPON THE OXYTUBERCULINE TREATMENT OF TUBERCULOSIS OF DR. J. O. HIRSCHFELDER.[1]

In February, 1896, PROF. J. O. HIRSCHFELDER, of San Francisco, called the attention of some of his professional friends to a new method of treatment of tuberculosis with a bacteriological product of his devising, which he called oxytuberculine. He presented a number of patients for examination, and apparently demonstrated its value. Nevertheless, he was advised to withhold the results from publication until further experience and time should verify them.

Subsequently—that is, in April, 1897—he read before the State Medical Society a paper[2] recording seventy cases treated with oxytuberculine. Thirty of these were in advanced stages of the disease, many having vomicæ, and forty were in earlier stages. Each of these exhibited the physical signs of tuberculosis in one or other of its stages; bacilli were found in the sputa of all. Other physicians had examined a large number of the patients at the beginning of and at different periods of the treatment, and had verified the diagnosis. DR. HIRSCHFELDER reported that sixteen of these patients were cured; that is, no evidence of the disease can now be discovered objectively or subjectively. Thirty-six were much improved—that is they are subjectively well; little evidence of present disease can be discovered; there are few or no sputa, and no bacilli. In some of these latter large vomicæ exist, but seem healed. Six cases were slightly improved, six remained unchanged, one became worse, and five died. All the latter were in the worst stages of the disease when treatment was begun; four died in from a month and a half to two months, and one in three and a half months.

During the progress of these investigations, DR. HIRSCHFELDER made forty-one series of culture experiments in the laboratory. These uniformly proved the inhibitory power of oxytuberculine upon the growth of tubercle bacilli in veal bouillon. It appeared a just inference that similar results might follow the injection of oxytuberculine into the body.

With these facts and statements before them, the members of the Faculty of Cooper Medical College determined to investigate the new treatment, and for that purpose the undersigned committee was appointed. Its several members have repeatedly witnessed the laboratory culture experiments, and have had before them for examination fifteen patients, who have been under treatment from two to several months during the past two years, together with their histories, bacteriological specimens, and the corroborative evidence of other physicians as to the diagnosis. Two of these patients, at the beginning of treatment, presented a mild form of the disease; in five the disease was pronounced; in four the lung was very seriously involved; and the remaining four seemed hopeless. There is no reason to doubt that all were cases of tuberculosis. Fever, cough, expectoration, hemorrhages, night-sweats, etc., had been present in nearly all. The physical signs and bacilli had been found in all. In many the diagnosis had been confirmed by other physicians. Physical examination of many of these cases was made by the members of the committee. No evidence of present tuberculosis could be discovered, although in some, old cavities were found. The concurrent testimony of all, except two or three recent cases, was of complete return to health, so far as appetite, weight and vigor are concerned. There was no cough, expectoration, hemorrhage or other symptom of disease. Several had been discharged from treatment months ago.

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[1] Adopted by the Faculty November 15, 1897.

[2] Transactions Medical Society State of California.

The conclusions reached by the committee are:

1. Oxytuberculine prevents the growth of tubercle bacilli in veal bouillon.
2. A positive therapeutic value has been demonstrated for it, in the fifteen cases examined; the more clearly as no other treatment was used.
3. No dangerous or untoward effects have resulted from its use.
4. It has been legitimately brought before the profession, since a full description of its mode of preparation has been published, thereby putting it within the reach of all.[1]

Finally, the committee feels justified in certifying these facts to the profession, to the end that oxytuberculine may be thoroughly tested, the limits of its successful application determined, and its place in therapeutics established at the earliest possible time. While some remarkable results have been obtained in advanced cases, no claims are made for the later stages of the disease.

L. C. LANE, President, R. H. PLUMMER,
C. N. ELLINWOOD, HENRY GIBBONS, Jr., Dean,
A. BARKAN, *Committee.*

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, September 28, 1897.

The President, W. J. HANNA, M.D., in the Chair.

DR. W. R. CLUNESS, of San Francisco, read a paper entitled "Industrial Life Insurance Justified". [Published at page 625.]

DR. G. L. SIMMONS: I regret that a younger man has not been selected to open the discussion upon the paper of the evening. My personal interest in life insurance examinations passed a number of years ago, and when the subject of fees in connection with industrial insurance was first introduced at our meeting several months ago, I for the first time learned of its aims, and also of some of its supposed disadvantages. At that time I was under a vague impression (probably obtained from reading the old English reports) that there had been an immoral element connected with the business, but, as stated, I was not sufficiently informed either to approve or deny the statements of those who had had some personal experiences in the matter. Subsequently I received some pamphlets upon the subject from Dr. Cluness, which no doubt all present have had an opportunity of inspecting, and after reading them over I found I had experienced a revolution of sentiment, particularly in regard to the benefits to the industrial classes from the operation of this form of insurance. Both kinds favor thrift and economy and in the case of the poor industrial class they are often led into ways of accumulation by the payment of even five cents a week, which, later on, influence them to invest in savings banks, loan associations, and old time life insurance. In short, as remarked in one of the pamphlets, industrial insurance is but a kindergarten for life insurance companies. I was also impressed by another observation made by a Sister of Mercy, "that if we say the insurance of young children is an incentive to crime, we imply that which which has no foundation in fact; *i. e.*, poor people do not love their offspring as much as the rich." The extent of the business of industrial insurance in the United States is so far beyond our usual conceptions that it will be important for us to note, that several million policies are now in force. The paper of the evening as it presents the different phases of this department is certainly a strong one, and I doubt if there exists in the literature upon the subject a clearer argument Freely admitting all that the author claims as to the good effects to the class particularly interested, and to the great corporations that control the business, I yet feel that, as a physican with a love for his calling, I must take issue with him upon the relations of the medical profession to the work. In my judgment the compensation allowed its medical examiners is totally inadequate for the service required, and its percentage methods in collecting the same must be humiliating to the members of a noble calling. As the highest obligation of a physician is to support himself and his family, and as all life insurance companies know that the true basis of their success rests with qualified examiners, why should we be required to give our services for a pittance and adopt methods which tend to pauperize the doctor and degrade his profession. This Society has often discussed the question of a proper fee for medical examinations of any nature and we have posted our decision before the world. As is well known we give our services, without price to the poor and needy but, in these insurance examinations no plea of this nature can be offered, and we act for wealthy corporations, if we act at all in this industrial branch, for a sum so ridiculously low that if the same scale were adopted for general practice, not a member of this Society could support his family in decent comfort I am strongly in favor of adhering to the price named in our fee-bill, and I can see no difference in accepting this industrial work upon a basis of seventy-one cents (the average sum stated by Dr. Cluness) and writing entrance examination certificates or office prescriptions for the same low figure. While the statement of the author is unfortunately true, that many qualified members of our profession in various cities and towns are anxious to accept the work for this small sum, is it not nevertheless a fact that they feel they have degraded their calling by this acceptance and only reconcile the act by saying that the necessities of life oblige them to take a fee below what is just and proper? Fortunately for our organization we were the first in California to resolve upon a fair compensation or nothing, and I trust that the time may be far distant when we descend to the level of those places where a few cents is considered sufficient payment for the services of a regular graduate in medicine.

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[1] Occidental Medical Times, November, 1896. Medical News, July 3, 1897. Journal of American Medical Association, July 31, 1897. Deutsche med. Wochenschrift, May, 1897.

Dr. H. L. Nichols: My friend, Dr. Cluness, as he usually does, in any literary effort he makes, presented his case admirably, and really there is nothing, perhaps, for me to say in regard to the matter, except that I was misquoted. I do not think I spoke in any way disparagingly of the industrial insurance business. The matter was brought before the Society in regard to the expediency of making professional examinations for a fraction of a dollar. I expressed myself unhesitatingly, and I believe it would be undignified on the part of the Society to do so. I believe there were some remarks made about that "sort of business," but I certainly claim that I did not go further than to say that insurance companies would take risks and receive the premiums, and pay only when they could not get rid of it. I look upon the insurance business as upon any other mercantile business, and, if honestly carried on, it is good; but I always claimed that the medical profession, as a profession, were not under any obligation to insurance companies, and that if our services were desired they should pay the same as any other business corporation would pay us, and that I believed that $5.00 was a minimum price, at least for a proper examination for life insurance of any character whatever, and I still adhere to my convictions. I believe in insurance companies, and I am not opposed to industrial insurance. The arguments brought forward by the author are sound. I read the pamphlets he submitted, and some of the arguments are very good. But one argument was used as against the danger and probable effort of parents to starve or destroy their children for the insurance, saying that it was so small that there would be no inducement. My idea is that parents who would starve or strangle their children for a thousand dollars would do it for ten. When this matter was before us, I did not consider it as dealing with the character or respectability of the insurance companies, but simply whether this Society could afford or should give its sanction to such insignificant fees for professional services.

Dr. L. A. Harcourt: Through the courtesy of Dr. Wright, I had the privilege of looking over the arguments intended to show the advantages of industrial life insurance, but I merely glanced over the marked passages, preferring to take my opinion from the author than from those of whom I know nothing. Against life insurance of any kind I have nothing to say. Life insurance serves an admirable purpose. I believe industrial insurance is not on trial before this Society, and it is not the province of this Society to seek or pass judgment upon industrial life insurance or any other. It is a business proposition.

Dr. D'Arcy Power: One of our most eminent scientists and philosophers (Draper) has asserted that throughout history the medical profession has been distinguished by the subordination of its class interests to the general good. I believe that this is so, and that it is incumbent on us, and all other bodies of medical men, to maintain this position by which we have been so honorably distinguished. If, therefore, it can be shown that industrial insurance is a great good to millions of our fellows, no question of medical fees should prevent us giving it our assistance, any more than in the case of hospitals, which are equally detrimental from the financial standpoint. The figures which have been presented by Dr. Cluness demonstrate that millions of workingmen adopt this method of insurance against sickness and death, and I know, from a long personal experience of the classes thus insured, that in no other way would such provision be made. I therefore say that if industrial insurance cannot be effected under the scale of fees we have adopted, we must adapt ourselves to the conditions, under pain of obstructing a great public good. It is obviously impossible that any company can insure a family of say five persons, and pay a medical man $25 for their examination, while such payment is only recovered (if at all) after a long interval, a few cents at a time. When we insist on a $5 fee, we really demand the suppression of industrial insurance, for with such a condition it cannot be made self-supporting. In regard to the insurance of infants, its evils have come directly under my own observation. In 1884 I was performing medical duties in the slums of Deptford, London. Case after case came under my care, in which infants were neglected with a view to their death and the enjoyment of the small sums for which they were insured. I wrote at the time to the public papers concerning it, and some years later my opinion was verified by the unearthing of the Giffin street murders, which led to the Parliamentary investigation, to which reference has been made by Dr. Cluness. I ought to say that the cases that came under my observation were not insured in regular industrial insurance companies, but in so called "Slate Clubs," where the inquiries are few and the payments small. I have heard women, in the slum district referred to, remark that the Prudential (the best known of the London industrial assurance companies) was "too particular." I believe that the temptation to destroy very young infants is greater than to make away with older children, and I favor the prohibition of the insurance of children under the age of one year.

Dr. F. Gundrum: I became prejudiced against child insurance from reading an editorial in the *Lancet* some years ago of two children who were murdered for this insurance, and it gave me a kind of horror of the business. I think the name that the author uses is a misnomer, unless it belongs entirely to the insurance company. There is no industry involved in this insurance, unless that in procuring the business. Now, whatever started the idea first of this child insurance, I do not know, but I do not believe that the company that first started it undertook to make an orphan asylum of itself. Whether I have good reasons or not, I have a kind of abhorrence of the whole business, and if I had the power I would make them quit or put them in jail. I may be wrong in this idea, as a business principle, but I feel that way. That there have been murders committed to get the insurance on these children we have proof of, and that there will be murders committed in future I am positive of. I have seen pretty decent (?) people neglect their children and wish they would die, without insurance, and if a child has an insurance upon its head—$100 or $200—I believe there are lots of people in this world—and even mothers—that would sooner they would die than live, in order to get the money. I believe in insurance in the industrial ages, and I believe it should be made compulsory, as in Germany. I was surgeon on a railroad east for fifteen years and when anybody got killed or injured we had a great deal of trouble collecting up. Finally the manager of the company forced every man on the road to insure, to take out an accident policy, and it proved a great blessing. When injured the men received a weekly stipend, and when they were killed the whole amount was paid. The allusion made by the author to my remarks that the company went into the business for financial reasons, on account of their financial standing, is correct. I stated that some good men or some of the best men in the insurance business had made that statement. I stick to it that these statements have been made to me, and if the author wants the names I will give them to him. It is true they are rival insurance men, but they made these statements. In regard to the fee, I think this is the real question before the Society. The reason I voted against this small fee was that we have taken the stand to hold up our fee-bill, and especially in life insurance examinations. We are a little different here, as Dr. Simmons remarks, than probably any other society in the world. I believe the Society has a perfect right to say whether it will make examinations, as regards this company, whether it suits this company or not. I spoke against the idea of taking these cheap examinations, and I stick to what I said, and I do not believe the Society could come down to a seventy-one cent fee. I do not blame the company for getting cheap examinations or cheap men, but let this Society stand by its record.

Dr. H. H. Look: When the subject of industrial insurance came up a few months ago I spoke against it rather sweepingly, because industrial insurance companies are associated in my mind with infantile insurance companies. I do not see why they should be, but I believe they are identical. As to industrial insurance, above a certain age, I am sure I could see no harm come from it. I think this question of infantile insurance does concern all medical societies and the profession in general. I cannot see anything but harm and evil arise from that form of insurance. There is a law of nature that before maturity the child receives benefits inversely to his aptitudes. In the infant stage where everything should surround the child for its safety, everything to preserve life, an option is taken on the child's life in case of its death; in other words, a parent wagers that the child will die, and the company that it will live. Now, then, it is very easy to bring about a child's death; it is the simplest thing in the world. There are a thousand and one things that can bring about a child's death, when there is a little money in prospect, especially with the indigent poor. I shall have to take issue to a remark made by one of the speakers, and that is that the poor love their children as well as other people. That may be true in some cases, but amongst the indigent, as we find them in large cities, those who drink and are addicted to all forms of vice, I have found parental affections very much weakened; they do not have the same feelings for their children as people of more moderate circumstances, which is demonstrated by a disregard for the moral and intellectual training. It is not wealth, nor station, that makes paternal love; it is a condition of the mind free from the influence of vice; it is education and refinement and religion. It is amongst these people that you find these crimes committed, and it is amongst them the agents of these industrial insurance companies operate. With industrial insurance I have had three months' experience. In Chicago I examined for the John Hancock, and, whereas, I had no positive proof as to what caused the death of some infants, I had strong suspicions of foul play. I do not think that any member of this Society can afford to take such business for the small pittance offered us. It is offering an insult to the profession to ask it to lend its influence to such a scheme, even if the remuneration was not a subject of complaint.

Dr. T. W. Huntington: I want to correct the report as it stands as to what I said in regard to this matter, wherein I was made to say that my faith in "cheap" insurance was weakened. What I intended to say was that my faith in *child* insurance was weakened. I have nothing to offer in particular on the general subject. Regarding the matter of examinations, I have felt and I still feel that we can ill afford to deviate from the established rule of this Society. We are not allowed to examine for fraternal organizations for less than $2.50, and I question the propriety of making an exception here. I want to say a word in regard to the much mooted fee-bill. There is a very grave misapprehension as to its maintenance by, and bearing upon the profession in this city. Our personal proceeds are much better than if a fee-bill was not in force. In a word, the fact that we say $3 for a call and $2.50 for office prescriptions, which gives a standard of charges, is far better than if the fee-bill read differently or was not in existence. Every man must do business for the remuneration his patients can afford, but when the patient is financially competent, I believe that we should charge him a liberal sum. I do not believe the leading members are cutting the fee-bill at all. We all render very important service for nothing, or for a mere pittance, and we consequently have to take considerably less than the fee-bill calls for; but I am certain that the amount of money we receive is considerably in excess of what it would be if we had no fee-bill at all.

Dr. H. W. Strader: I just wish to call the attention of the members of this Society to one fact in connection with fees for these examinations. This company charges a high rate for industrial insurance, higher than is charged by companies of the same age in the old line companies. Other companies will furnish the same insurance for 30 per cent. less and pay $5 for examinations. I think when a company comes to us we should reject any such proposition, because if we are going to do business for what other people offer us we can consider what we are coming to. It is only a question of time until we will be in the same situation as they are in San Francisco and other large cities. It is a serious matter with the younger men; the older ones who have an established business, their homes, and a certain income, are not so much concerned with this question. When it comes to making examinations for absolutely nothing, I must condemn the whole proceeding as contrary to professional dignity, and to the interests of the public.

Dr. J. H. Parkinson: The question, it seems to me to-night, as it has seemed on other occasions, should turn entirely upon the fees and not upon the merits of industrial insurance. I do not propose to discuss the question of the legitimacy of this class of insurance or its benefits. As regards the Pacific Mutual, it being a mutual company, I feel that, as a policy holder, I have a right to criticize the management of my own concern. As regards this particular class of insurance, my experience with it has been entirely on the other side of the water, and it has been similar to that of Dr. Power. It is true, as mentioned by the author of the paper, that murder has been committed and crime instigated by the ordinary old line life policies, and it is also true that it has been instigated by the smaller sums. I feel towards child insurance very much as I do towards insurance of a wife for the benefit of her husband, and, probably, from purely sentimental reasons. There is nothing illegitimate about the latter, but I feel very strongly against it. I believe there must be something more than sentiment, because, if I am not mistaken, most of the insurance companies view this kind of policy with suspicion. Now I think the insurance on a child's life comes within the same sphere, and, while aware that industrial insurance, so-called, is of benefit to that class of people, I do not like its child insurance feature. I do not see that the fact that the ratio of fee to amount of policy in industrial insurance when compared with the same figures in the ordinary life department is larger, has any bearing on the subject. The condition of the profession in Sacramento, as compared with other places, is mainly due to our Society. In visiting the various cities throughout the State, I have always heard that the profession here was better off than in any other place. In San Francisco, I have frequently heard it said, that we had a better working medical society than they in the metropolis. I do not think that the pecuniary condition of the whole or of some is better than elsewhere, but I do think that the general condition of the profession here as regards the amounts that they collect for the business done, is rather better than in any other large city in the State, taking into consideration the number of men to the population. I feel certain that, had San Francisco, many years ago, a Society organized on the same lines and conducted by a similar class of men, and pushed in the same manner, the profession there to-day would be very much better off. If this fee or compensation be admitted as legitimate or proper, and accepted as such, I regard it as a possible breaking down of the barrier. I believe that if this be accepted or conceded as proper, it will undoubtedly result in further demands and in further concessions, if we are to judge by past history in connection with fees for life insurance. This Society has been instrumental in bringing about a return to the legitimate fee by the Equitable Life Assurance Society on this coast. It has not succeeded, so far, in bringing about the same result in the New York Life, but that company has adopted something since that it did not have before. It has cut down its blank which makes less work for the examiner. The reason that the condition, as expressed by the author of the paper exists, that so many men are desirous of getting these appointments, and that he constantly receives letters from prominent men in the east, soliciting them, is simply because the profession is overcrowded, and until we can diminish the output, we will have that kind of competition. It is due to the struggle for existence, and I think we are going to encourage it if we accept this fee. It is true that this form of life insurance benefits a great many persons, but I cannot see that this brings it within the scope of medical charity. My only objection to this whole business is the fee question, and I cannot see why, if this company or any other in this same line, can take any of this business without examinations, it cannot take it all. If they be unable to pay the minimum fee, why not pay a salary. In regard to Society work as alluded to by Dr. Simmons to-night, it is a fact that, if we do not take it, it goes into other hands. I say let it go. It has been said that this Society has stood in the way of some men making a living, and that it has been a loss to the profession. I say that a greater mistake was never made. By that business going to men of inferior attainments, the profession, as a whole, makes far more than if one of our best men held such a position, as he would then do all the business, whereas people are afraid to trust the inferior man.

Dr. W. A. Briggs: The subject has two aspects—a social and a professional—and the author is right in approaching it from both. As medical men we should be able to discuss it from both, for, except the specialists in these questions, no one should have a more intelligent comprehension than ourselves of the problems of sociology. The conclusions of the author as to the social aspect of the subject are, to my mind, incontestable. Industrial insurance *does* promote industry, economy, foresight and self-reliance. Indirectly it promotes other virtues, individual as well as social. It tends, and powerfully tends, to lift people out of pauperism, to encourage self-dependence, instead of dependence on the State. That industrial insurance, more than any ordinary insurance, incites to crime, I think has not been shown. On the contrary, I believe the reverse is true, and for two reasons—first, because in the former the amount involved is trifling, in comparison with the latter; and secondly, because parental affection, on the average, is more unfailing than conjugal affection. If then, on this ground, on the ground of its criminal tendency, we should condemn industrial insurance, we should, on the same ground, and the more strongly, condemn ordinary life insurance. This I believe we are not quite prepared to do. We may safely conclude, therefore, that industrial insurance is a step in the right direction, in the direction of social and economic differentiation and integration—in other words, of evolution. Now we approach the question from its other aspect—the professional one—and here I must confess to a line of cleavage between myself and the author. As a companion he is so agreeable, as a guide generally so trustworthy, that I part from him with hesitation and regret. It is so pleasant to agree with him that I always do agree with him when I conscientiously can, but the paltry pittance doled out by industrial companies in ostensible compensation for an important professional service would be ridiculous were in not pitiable. It makes me laugh and shudder. In London, in Paris, in New York, in San Francisco, everywhere, we are crowded from within and without by self-styled "medical colleges," by hospital associations, by clinics and polyclinics, by fraternal societies, and now by industrial insurance. It is our duty, no less than our interest, as far as in us lies, to resist unjust reduction of our fees. The community, as well as the profession, would be injured by such reduction. A high standard of character and ability can not be long maintained in any profession on an insufficient diet. The best men are not entering the medical profession as they should do. Inferior men, men of inferior ability, inferior character, inferior attainments, are entering it in alarming numbers, if the rosters of our third and fourth rate "colleges" give us trustworthy information; but I repeat, that men qualified by nature and education for the study of medicine are looking askance at us, not for this reason only, but for this reason among others, that, particularly in the great cities where ambitious men naturally congregate, the mere livelihood of the physician, whatever his attainments, is precarious in the extreme. The Sacramento Society for Medical Improvement never has accepted, and I trust never will accept, a pauperizing fee. The difficulty, however, and I recognize it as a difficulty not of the author's creation, but of conditions for which neither he nor his company, any more than ourselves, is responsible; the difficulty, I say, as far as industrial insurance is concerned, might be overcome, it seems to me, by dividing the risks into two classes—one, the preferred, in which a medical examination is made and properly required and the rate kept at a minimum; and another, the ordinary, in which other safeguards are adopted. No examination is required and the rate is correspondingly advanced.

DR. W. H. BALDWIN: I have learned more to-night about industrial insurance than I had known, and I am very glad that it has been established in this community, for I have always gone upon the principle that a man never got anything but what he paid for. As regards fees, I disparage any reduction of our old fees; I would like to see them maintained. Corporations look upon it as paying out a certain amount of money for a certain class of work, and if all the men in this room were similarly situated they would look upon it in the same way—to get all the work possible for the money laid out. I must, however, discourage any reduction of legitimate fees.

DR. CLUNESS: In the first place I desire to thank you for the courtesy extended in affording me the opportunity of presenting a paper upon a subject not strictly medical. If, however, you will read the April number of the OCCIDENTAL MEDICAL TIMES you will find my excuse. The onslaught on industrial life insurance as there published, is, in my opinion, unworthy of the members of this Society. It therefore occurred to me that, being a member of the Society and the Medical Director of the company referred to, it was my duty to give you a true account of this system of insurance. In the discussion alluded to, the question of fees for medical examinations was made incidental to that of industrial life insurance, and I have followed the same lines in my paper. In the main I agree with you on the subject of fees for examinations in life insurance, but the officers of the various companies, the world over, have canvassed the subject most carefully, making every possible effort whereby more adequate remuneration could be made to medical examiners than at present, and the compensation now paid is the result of their efforts. Dr. Simmons has suggested that a fixed salary would be the proper method of solving the problem, but this has been tried and found very unsatisfactory. Medical examiners receiving a fixed monthly salary will not attend to the business properly. And, as at present conducted, it is found that the fees paid to examiners in industrial life insurance are considerably more than any reasonable monthly compensation would amount to. Medical men, like all others, must have an incentive to the performance of their work, and experience has demonstrated that the payment of a fixed amount for each examination made is the only method by which the business can be safely and properly conducted. It appears evident that the statements made by most of you was based upon error, resulting, doubtless, from a very imperfect examination of the subject. Too little regard was paid to *facts*. The claim that murder after murder has been committed in England and America is not true. The manager of the Prudential, of England, was never able to trace a single case with anything like certainty. The Vice-President of the Metropolitan, of New York, the largest company in America, which issued policies last year aggregating about $200,000,000 of this kind of insurance, never had reason to believe that by direct act or by neglect, a child had been brought to its death for the sake of the insurance on its life. Were it true, as stated by Dr. Look and others, that murder after murder had been committed, is it conceivable that there would be no law prohibitory of this kind of insurance? Parliamentary committees have been appointed which sat for months investigating the subject, and each time they arose by informing Parliament that the facts were by no means such as to impose on Parliament on obligation for the sake of public morality to legislate specially with a view to the prevention of insurance of children; and this was as long ago as 1854: and it is a fact that before the adjournment of Parliament, an act was formulated which became a law in 1855, authorizing the doubling of the amount previously issued upon one life; and whenever the subject has been investigated, in Europe and America, provision has been made legalizing it. Dr. Hugh Jones, in his work entitled "On the Perils and Protection of Infant

Life," informs us that cases of neglect are far more common into which the element of life insurance does not enter. Then, again, is it supposable that such a body of men as those who constitute the directory of the company would be engaged in a scheme whereby murder would be committed, so that they should enjoy the privilege of paying the amount of the insurance? Wherein would arise the benefit to the corporation? Whence would come the money to pay the losses? Then, again, we are gravely informed that life insurance companies pay only such death losses as they cannot avoid. Assuredly this is not true. There is no company on earth which could afford to pursue such a policy. But does that speaker claim that life insurance companies have no right to investigate doubtful claims, or to contest fraudulent ones? Does any one maintain that life insurance companies have no right to resort to courts of justice for the settlement of controversies between them and their policyholders, and that they must pay all claims made against them, just or unjust, or quit business? The Supreme Court of the United States says that such action would be arbitrary, unjust, and dictatorial. Assuredly there is no business on earth which contests so small a percentage of claims against it, or in any way makes its claims the subject of public investigation. On the other hand, when an effort is made to defraud a company, or when a murder is committed for the sake of the insurance money, there is no organization extant that will pursue the culprit with such determination as a well organized life insurance company. To resist the payment of a just claim would be suicidal to any company, and I assure you it is never done. The company I represent has not contested the half of one per cent. of the claims paid, and this is about the average of all regular companies. Not a quarter of a cent is ever unjustly withheld from the insured or his heirs, three and a half days after proofs of death are filed being the average time in which our claims are paid. It is by no means an agreeable task for me to defend the company I represent, yet having been present at its birth, and having been its Medical Director ever since it was a year old, I feel that it has become part of my life, and knowing it to be conducted in an honorable and just manner, able and willing to pay all just demands against it, I surely would be less of the man than I believe myself to be, were I to allow such gratuitous and false statements as have been made by members of this Society to go uncontradicted. Gentlemen, life insurance is not only a legitimate business, but it is the grandest humanitarian scheme that has ever been devsied, and its crowning glory is its industrial department.

CALIFORNIA ACADEMY OF MEDICINE.

Regular Meeting, September 18, 1897.

D. W. MONTGOMERY, M.D., in the Chair.

Symmetrical Congenital Deformity of Fingers and Toes.—DR. H. B. A. KUGELER presented the case of a boy, with the following history: This patient is the subject of a peculiar symmetrical congenital deformity that I have never seen before. His mother says he has had this since he was a baby. She never thought anything of it and thought he would outgrow it, and finally he came home from school crying and said that his thumbs hurt him when he was writing. The interphalangeal joint of the thumbs and of the big toes has this peculiar twist in them. The thumbs are both exactly the same. When I first saw him he complained that he could not write; when he would take hold of his pencil it hurt him. I put him on arsenic and syrup of iodide of iron, and the pain went away. I do not know why. There is no change in the appearance of the growth. Dr. Sherman and I were discussing the fact as to whether there was such a thing as symmetrical enchondroma or sarcoma. An interesting feature in connection with this young man is, that he has a sister who has a congenital dislocation of the hip, that Dr. Sherman saw some years ago and saw to-night again for the first time, and has since come to a different conclusion as to the treatment.

DR. H. M. SHERMAN: This boy requires, more than the average child, to be spared the cruelty of the pointed-toed shoe.

DR. D. W. MONTGOMERY: Enchondroma in the fingers and toes, especially in the fingers, are quite frequent. I suppose that that would be excluded here by its absolute symmetry. The absolute symmetry in the lesions would almost exclude tumor formation. There are symmetrical sarcomata, but when you have four joints involved it would be hardly probable that it is a tumor formation. These bone tumors are curious and curiously symmetrical, but to have them absolutely symmetrical as this is, is a curious thing indeed.

DR. J. D. ARNOLD: Do you look upon this tumor or this swelling upon the great toes as a similar deformity to that existing in the thumbs?

DR. KUGELER: I think it is exactly similar. His mother says that his toes stuck out in that way when he was small, just the same as his thumbs do.

Gumma of the Palm.—DR. D. W. MONTGOMERY reported the following case: This man has a gumma of the palm, and also has some marks of tubercular syphilis on the anterior fold of the right axilla and on the lower limbs. He had an ordinary syphilide of the palm for a time and it eventuated in this gumma. Gummata of the palm are not very frequent. He gives no history of a chancre. He had no chancre that he knows of. He came to me some two years ago, and then he had a syphilide of the palm, which I treated as I am treating this now, with potassium iodide internally and hydrarg. externally. There is a well marked syphilitic eruption there. There was quite a well marked ditch around that the other day, accentuated by a group of good granulations. You can see the remains of the ditch there now. It soon formed the reniform ulcer, with the cicatrization going on toward the center. It is curious how those things change their character. The good health of the man and the character and the multiplicity of the lesions exclude tuberculosis. He went to the hospital last June and was there for two weeks and they dried it up with iodoform. He took no medicine internally; zinc oxide ointment was applied. One bottle of salve and one bottle of medicine straightened up his hand for the time. In reply to an inquiry the speaker said he used mercury subcutaneously, with good results in obstinate cases, those in which he could not obtain any result in any other way. He would not use it as a general routine plan.

DR. A. E. REGENSBERGER: I am glad to hear that. I think mercury subcutaneously ought not to be used at all, or if used, it ought to be in cases which are selected with a good deal of discretion and judgment. Very bad results have followed that treatment. I read nearly every year of cases of death, almost, from using both soluble and insoluble salts hypodermically. I consider it very dangerous. Gangrene has been caused by it.

DR. MONTGOMERY: In treating cases of syphilis I tell my patients that there must necessarily be syphilitic tissue there long after the gross appearances have died out, and that they must keep up the treatment, to the end that all that shall go away. Frequently they attend to the admonition and keep it up, but it is very hard with any ordinary human being to keep up treatment long after the subsidence of the outward symptoms.

Obstruction of the Inferior Vena Cava.—DR. W. WATT KERR reported a case of obstruction of the inferior vena cava. He said: This is a specimen I wish to show you. The exact nature of the case has not been determined, and I have not had a report. The specimen was taken from a woman, about 50 years of age, who came into my ward from the surgical side of the house and was referred to me as a case of heart trouble with abdominal tumor. She died in about 48 hours. The history we got of the tumor was that it commenced away down in the pelvis and gradually ascended and occupied, I think, about two-thirds of the abdominal cavity when she came under our notice. The patient was extremely emaciated and weak, with thready pulse, but no pain. When she died an autopsy was made and a large tumor was found involving the whole of the pelvic organs and the blood-vessels. The heart had some atheromatous valves; but the particular point was this large plug filling the lower portion of the vena cava and extending into the common iliac veins. This thin membrane is part of the vena cava. This mass was quite solid. We split up the cava, giving a section for examination. The mass completely filled the cava. When you pressed upwards on the iliac veins, the blood flowed past the tumor. Dr. Montgomery examined it and in his opinion it was sarcomatous. I was not present at the autopsy. The report made to me was that the pelvic organs, the uterus and bladder and everything were involved in one mass, so that you could not separate them from the tumor. In reply to an inquiry the speaker said: All the organs performed their functions properly. Nothing was interfered with except nutrition and the circulation. There was a little edema about the limbs, not as much as you would expect in an ordinary heart case; no dropsy. The hands were withered and thin, and the cheek bones prominent. She did not complain of pain. I saw the patient sitting up within twelve hours of her death. Extreme weakness was the principal thing she complained of. I never before have seen anything extending into the blood-vessel.

Dr. D. W. Montgomery: You can see where the tumor has pierced the wall of the vein. Then it has grown down. This is a tumor mass, and it is altogether too firm for clot. It has grown as a polypus right into the vein.

Dr. H. B. A. Kugeler: It is wonderful the length of time some of these things will run. I remember, some two years ago, seeing a captain of a river steamer with enormous edema of both limbs and of the scrotum. The scrotal edema was what bothered him more than anything else I found that he had a tumor that evidently involved the vena cava. He stated that Dr. Morse had opened his belly and finding an inoperable sarcoma closing up the vena cava, had left it alone and sewed him up The man left the hospital, went back to the steamer, and made two or three trips to Stockton and back and then the edema became worse. Months afterwards he was still alive at the hospital, but with this swelling, and that was about all; otherwise he felt comfortable and had no pain. I think it was almost a year before he died.

Dr. J. McCone: In examining the patient it was noted that a resonant strip passed over the surface of the tumor almost similar to that present in a kidney tumor from the colon, passing over it. This resonant strip passed over the growth from the right side towards the left iliac fossa. The autopsy showed that was a piece of the small intestine in front of the tumor and adherent to it. The tumor seemed clinically to be separable from the pelvis, and I was told by the interne who performed the autopsy, that the pelvic organs were all bound together and seemed to be pedunculated, the pedicle being right above the symphysis and towards the back. For that reason it was thought that the tumor began from the mesentery and that the pelvic organs were not involved, but of course that was shown to be different at the *post-mortem* examination. A peculiar thing about that mass was that at the top it was perfectly dome-shaped, like the top of a banana. It seemed at first as though a portion of the sarcoma got into the vein and that the blood coagulated about it, or that the tumor grew up to the vein and the blood stream washed it away, just as a stream of water would round off a rock. It was perfectly smooth. The woman had had absolutely no pain. She said that she thought her whole trouble was a matter of hypnotism, because for the last four or five months she had become progressively weaker and weaker. She felt that there was some one influencing her and making her weaker, because she could not really say that she had any pain or any pronounced trouble Her legs were not very much swollen; the hands were very thin; there was no puffiness under the eyes; she was very much emaciated. I do not think she had any digestive trouble. The uterus was right in a mass of sarcoma.

Dr. Montgomery: This is a particularly interesting tumor, in that it shows its malignity by its being able to penetrate into a vein. It has penetrated, not by erosion, but simply by growing through it. Then it shows that it is a sarcoma by its rounded shape, looking like a polypus. If it were a carcinoma, one would expect it to be much more friable, because carcinoma is composed of tissue that dissociates much more readily than sarcoma. It must have grown from the wall of the uterus, and possibly may have been a fibroid that had undergone malignant change. The fact of its growing into a vein is a very interesting one from a historical point of view. I think the first notion that man got of metastasis was from a tumor growing into an iliac vein The case was reported years ago, I think by Kohler or Wagner, and is to be found in quite a number of pathologies. It was an enchondroma growing, I think, from the right sacral synchondrosis It grew into the vein and then pieces of the tumor came off and plugged the lungs.

Dr. E. E. Kelly: It seems strange that there was neither pain nor edema to any great extent. I presume that can be accounted for by the fact that the tumor must have been of comparatively slow growth. The blood-vessel dilated, and perhaps the compensatory veins in the pelvis and other regions enlarged so as to help carry the current. I have seen several cases, as undoubtedly you all have, of thrombosis in large veins, or in arteries especially, and the pain is always very excruciating for the time being.

Dr. Kerr: The woman had a regular parchment-covered appearance, so far as the fullness of the blood-vessels was concerned. The blood-vessels were empty; there was hardly any pulse, it was hardly perceptible. That would account for the lack of edema—the simultaneous destruction of blood.

Dr. Montgomery: Sarcomas sometimes grow with wonderful slowness. They may come to a complete stop in their growth, and they may retrograde entirely. That is the thing, I think, that accounts for the marvelous cures of sarcoma; their complete retrogression. Keloid is a sarcoma potentially. It is well known that keloids can retrograde and leave nothing but a simple scar behind, and I think that quite a large number of these cases which are cured by arsenic and by curious soups or whatever you call them, made of bacilli and cocci, are very frequently simply those of involution of sarcomata. Sarcomata are not as absolutely malignant as carcinomata. Carcinoma will go along in even tenor and destroy the patient; sarcoma may not do so at all. In reply to an inquiry the speaker said adenoid sarcoma, very frequently, grows with startling rapidity. That is the reason why a great number of men who keep no history of their cases form their opinions on a particularly striking case. Sarcomata, when very malignant, are so strikingly and picturesquely malignant, that many men say they are more malignant than carcinomata, which is not true.

Dr. H. M. Sherman: I watched a case of sarcoma for four years, and I did not think it was sarcoma because it was so quiet. For eight years it stayed perfectly quiet on a man's leg; finally it exploded and amputation had to be performed. It never caused him a particle of pain unless it was touched; then it was a little tender.

Dr. Kerr: Sarcoma of the liver produces intense pain.

Chancre of the Lip.—Dr. D. W. Montgomery reported this case. He said: I have looked over a large number of cases of syphilis, but have been unable to find one in which anything is said about the rouge stick as a means of conveying syphilis. I have never heard of that means. This woman was a nice young girl, not in any way lewd. She was perfectly frank: she stated that she had had an admirer but he had left the city quite a length of time before, and too early to be supposed to have given her the chancre. She was engaged to the young fellow and she admitted kissing him but did not admit any other means of infection, and she would have admitted it, because she was really in a pitiable state, trying to find out if possibly she had syphilis. I told her frankly it might be the case, and kept her on probation for over forty days. At the end of that time she was in despair, and would have told me any means, I am sure, of having contracted it, in trying to elucidate her own case, and it was quite a time afterwards that she thought of this possible means in the hair-dressing establishment.

Dr. A. E. Regensberger: I have looked up that matter, too, and have not heard of a chancre or primary syphilis being transferred from one person to another by means of the rouge stick. We all know that chancre of the lip is the most frequent of extra-genital chancres. Buckley has collected over 9,000 cases of extra-genital chancre, of which over 1,900 were on the lips. Any utensil which has been used by a syphilitic might carry the disease to another person.

Dr. J. D. Arnold: It would have been very interesting to get the address of that hair-dresser.

Dr. Montgomery: I got the address. Of course an inquiry as to whether this particular hair-dresser had syphilis could not easily be made, but would it not be well for the attention of the community to be called to the fact that that is a possible and ready means for the transmission of infectious diseases?

Dr. E. E. Kelly: It might be especially dangerous, because so many bleached blonds and people of that kind have a great deal of hair-dressing done, and respectable women go there at the same time. If the hair-dresser had mucous patches, or any form of syphilis, almost, she could transmit it. She could readily infect that stick and the next person could very easily be infected.

DR. MONTGOMERY: It seems to me that there must be quite a number of cases from that very source that attention has not been drawn to. The whole question of barbers and hair-dressers is a very grave one. They are the dirtiest, nastiest people we have to deal with. People who are otherwise quite dainty, go into those places and submit to treatment that they would not think of subjecting themselves to in any other situation. It is conventional. Every one of us will allow things to be done by those fellows that we would never think of allowing any other person to do. I am pretty sure that I traced a case of spinal disease to a chancre that occurred on the top of the head, and that that chancre was probably due to transmission of syphilis from a scissors to a little wart or excoriation. The man, I am pretty sure, had a chancre on the top of his head, and he afterwards got a transverse myelitis. Barbers are, to a certain extent, surgeons, and ought to be made to conform to surgical rules in regard to hygiene. They do not, and the community acquiesces in their way of doing things, and that in an eminently clean country. Tinea is quite frequently transmitted by these men, and they often treat skin diseases. The barber shop needs a thorough crusade against it.

DR. REGENSBERGER: I believe these fellows ought to be licensed and under certain rules and regulations, to be drawn up for them by the medical profession.

DR. ARNOLD: In this case there is a strong probability that the hair-dresser in the establishment had syphilis of the mouth, and it is not that special rouge stick which is the source of danger; it is the hair-dresser; because she will infect any rouge stick that she happens to get hold of. The question may arise, is it not your bounden duty to investigate this special case?

DR. H. M. SHERMAN: The education of the people is the most serious thing the profession has to contend with. It is wonderful the reluctance with which they will accept a simple scientific fact. Any wild, hair-brained theory that a fellow wants to exploit, is swallowed whole without a question, but if you go to them with a simple, plain statement of a proposition that has been worked out and proven, they regard you with doubt and suspicion. Take tuberculosis—and certainly there is nothing that has been agitated more than tuberculosis in every paper published for the last few years—there is not a soul that knows anything about it, even the most intelligent. A lawyer came to me a few days ago, and he knew nothing about what tuberculosis was, in spite of the fact that the whole of the natural history of tuberculosis has been printed over and over again in every daily paper in San Francisco. You cannot educate the people to believe anything that does not contribute in some way to their amusement or their comfort. They do not want unpleasant facts. These people who like to have their lips reddened up will have them reddened up, syphilis or no syphilis, rouge stick or no rouge stick; they will have it done somehow.

DR. ARNOLD: This difficulty which Dr. Sherman adverts to is a tremendous one, and every practitioner must go up against that stone wall nearly every week of his life—the difficulty which one has, to get the simplest and the most ordinary precautions against transmission of such diseases attended to. It is rarely that a family is found willing to submit to the isolation of a case of tuberculosis.

Sarcoma of Ovary — Sarcomatous Degeneration of Fibroid.—DR. H. KREUTZMANN exhibited these specimens. He said: The first specimen was removed from a woman about 50 years of age, who had been feeling fairly well, but for about half a year she had noticed pains in the abdomen and generally failing health. I saw her about a week ago and examined her, and in the pelvis I found in the lower part of the uterus a mass which I thought was a fibroma. It felt that way, but I could distinguish one part which felt harder. There was some fluctuation present. I was convinced it must be malignant, and I operated and found this tumor. Here is a tube running over it, and there were adhesions with the intestines, adhesions with the bladder, and the bleeding was very free. That part where it was adherent to the uterus bled profusely. On the other side I found this tube which contained some muco-purulent liquid. I removed all. The specimen has not been examined microscopically. I think there is no doubt about the character of it. I think it was sarcoma of the ovary. Here is another specimen removed from a patient 44 years of age; an otherwise pretty healthy woman. She had been complaining for a few months of severe hemorrhages and some purulent discharge from the uterus. I found an enlarged uterus; one side being larger than the other. I made a diagnosis of fibromatous uterus and decided to remove it. I did so last Thursday. It was a fibroid, undergoing sarcomatous change.

SAN JOAQUIN VALLEY MEDICAL SOCIETY,

Second Semi-annual Meeting, held at Bakersfield, October 12, 1897.

The second semi-annual meeting of the San Joaquin Valley Medical Society was held in Masonic Hall, Bakersfield, the Society being called to order by the President, W. N. SHERMAN, of Merced.

President's Address.—W. N. SHERMAN, of Merced, President of the Society, then delivered an address [published at page 622].

Hysteria.—J. H. FULKERSON, of Bakersfield, read a paper upon this subject, which he characterized as a diseased state of the nervous system. He said it was too frequently regarded as a mental perversity. The popular idea that hysteria in women was invariably connected with diseases of the genitalia, was erroneous, as disorders of the other abdominal viscera were quite as frequently responsible. It was certainly closely associated with some morbid condition of the sympathetic system. Typical cases were found in men, though more rarely. Some cases are associated with traumatism, and, in this direction, many mistakes have been made. Thus, after an accident in which no serious injury has been sustained, symptoms will develop which are ascribed to the accident, though really due to hysteria. While hysteria attacks all classes of society, an excellent field for its development is amongst those who lead an aimless life of complete mental and physical idleness. A diagnosis of hysteria was often difficult, as there were many diseases that it simulated—the different paralyses were often simulated. Local anesthesias and epilepsy were frequently simulated. In the latter case the absence of frothing at the mouth and the condition of the pupils were important aids in diagnosis. Regarding treatment, the first and most important point was to gain the entire confidence of your patient. As the trouble was principally mental, cultivation of self-control, with the removal of all exciting causes was the most important feature. When an acute attack occurs, electricity, the cold douche, chloroform, and apomorphine would all be found useful.

DR. J. B. ROSSON, of Tulare: About two years ago I was sent for to see a woman who had attempted to take carbolic acid. I found the front part of the body burned by the acid, but could not find any signs of its having been in her mouth, so I doubted her having taken it. I gave her a hypodermic injection of apomorphine to empty the stomach. She was in a semi-cataleptic and had symptoms of hysteria, but the apomorphine woke her up before I could put my syringe away. Apomorphine is the best remedy I have found for these hysterical subjects. I had a case of hysterical hiccough; I gave morphine, whisky, and everything to relieve the patient, but she got worse and worse and it looked as if she would die. I finally gave her an emetic of ipecac, one powder every 15 minutes, until she had taken three powders, and this relieved her completely. Ipecac will relieve hysterical hiccough, and I think apomorphine will do the same. I also wish to mention the case of a man who suffered from neurasthenia and had various imaginary troubles. He could not walk a quarter of a mile without resting. He imagined that a foreign body was in his stomach, as by a slight movement of the abdominal muscles and pressure upon the abdomen, a flow of gas into the stomach caused him to imagine that there was something there. Finally I told him that we would have to perform a laparotomy and take out the foreign body. We anesthetized the patient, cut through the skin and sewed it up and exhibited the supposed foreign body, and thus produced a permanent cure by suggestion. In another case, that of a woman, I impressed upon her mind for a week, until she believed in it, that I was going to use a battery of zinc and copper, a small one with a hole through the center, with a string attached to it. I impressed upon her mind very strongly the benefit she would receive from it, and, finally, got her to believe firmly in it. She put it around her neck and wore it as long as she lived, and it had the desired effect.

Gastro-Intestinal Antisepsis.—A. J. PEDLAR, of Fresno, read a paper upon this subject. Recognizing the germ theory of disease and the positive influence of certain germicides, such as quinine, which was equally effective in the test-tube and in the human system, he believed it would be possible to dislodge, in the gastro-intestinal canal, the various pathogenic germs, if we could detect their earliest invasion. This was not now possible, but as medicine had been practically remade during the last ten years, it was reasonable to expect such an advance in the future. Normally, the intestinal canal contains large numbers of bacteria whose action was held in check by the healthy secretions. Under the influence of disease these bacteria multiply and the foul odors of the discharges were certainly suggestive of putrefaction and indicative of the application of antiseptics. Much had been written upon the subject of intestinal antisepsis within the last five years, especially in connection with enteric fever. The practice had been steadily gaining ground, but unfortunately it met with opposition in the house of its friends, by the infallible formulary that had been announced for this purpose. Constructed along "shot gun" lines and prescribed with ironclad instructions as to necessary frequency of administration, it is not surprising that many thoughtful men had been reluctant to indorse them. The speaker said he had tried the so-called Woodbridge treatment and believed there was merit in some, if not in all of the drugs suggested, but he had too much knowledge of enteric fever to treat it uniformly with the same pellets, and too much regard for humanity to dose his enteric patients every 15 minutes for 24 or 36 hours, while more humane methods were equally effective. Regarding the Brand method, he believed that with less bathing and with the use of intestinal antisepsis, a better showing could be made. To construct a system of therapeutics which shall be as strictly antiseptic as possible, having due regard for physiological structure and process, is the problem to be solved.

DR. C. A. RODGERS, of Bakersfield: I was very much interested in the paper, as I am a firm believer in the theory of bacteria. I depend, largely, on cathartics, elimination, and irrigation. Experience has demonstrated the value of various antiseptics which have been used experimentally, in the treatment of those diseases in which there was reason to suspect the presence of a specific organism, and a few practitioners now use, in almost every case of enteric trouble, an antiseptic. My favorite is the sulpho carbolate of zinc. Speaking of the cold water bath, I never was in favor of that practice in enteric fever, but I think a great deal of the discussion in a late journal, by Delafield, of New York, of the combined hot hip bath, irrigation, and antisepsis. Several varieties of microörganisms exist, normally, in large numbers, in the digestive tract. They are ordinarily incapable of injurious action, because they are rendered inert by the normal digestive fluids. But when such normal secretions become perverted, vitiated, or arrested, the germs already there, or those introduced with ingesta, are placed under conditions favorable to their development, and, as a consequence, changes ensue. If only a single local infection supervene, it may be, and it is possible, by the use of proper antiseptic measures, to limit the morbid conditions, and to prevent fermentation and putrefaction.

DR. G. H. AIKEN, of Fresno: I have been, during the last two or three years, impressed with the importance of the subject of intestinal antisepsis, especially since I treated a case of typhoid fever somewhat after a modified Woodbridge method. So impressed have I been with the value and importance of intestinal antisepsis that I invariably combine it with cathartics in the treatment of ordinary fevers found in this valley, or in those similar conditions which we term bilious fever. I believe I have better results than formerly. In the treatment of fermentative diarrhea, ileo-colitis, in the young, and in dysentery in adults, the results have been so satisfactory from the antiseptic treatment, that during the last 12 or 15 months I have used nothing else; not even astringents. When we consider the effete material in the intestinal tract and the number of bacteria there, the offensive gas and the offensive discharges, especially in hyperpyrexia, it is not strange and it is certainly rational, that we should employ this means. We now know that appendicitis is not due, in a majority of cases, to a foreign body, but to some catarrhal inflammation brought about by bacteria, and we have found, in the treatment of this disease, although in a measure surgical, that we get excellent results in recurrent cases when we combine cathartics with our antiseptic treatment. I believe, as the author has intimated, that in the past five or ten years, medicine has been revolutionized as regards the treatment of diseases of the intestinal tract. You can hardly pick up a journal without noticing that physicians have been converted from the old methods of treating summer complaints, with the old chalk mixture, lead, and opium, to antiseptics. I believe, by the elimination of effete material and a course of regulated diet, leaving the least amount of debris, with the administration of antiseptics, we may cure intestinal disease. In the past three months, in a case of gastric catarrh, I have found the combination of some antiseptic exceedingly efficacious. I believe that we shall be obliged to accept the theory of Woodbridge in the treatment of typhoid fever.

DR. R. A. FURGUSSON, of Bakersfield: The revolution, which has taken place during the past few years, in medical science, points toward the presumption that all fevers are due to an invasion of the circulating media by either microorganisms or the toxines of microörganisms. Hence, in the treatment of fevers, the rational practice would be to destroy the invading organisms by a germicide, or the toxin by an antitoxin. As yet this department of medicine is in the embryotic state, and, from a scientific point of view, only a dim and puzzling glance can be obtained. For instance, as in the case of the bacillus coli communis, mentioned by the author, this germ, under usual circumstances, appears to be benign and probably fulfils a useful purpose in the economy, whilst under certain other conditions it appears to be pathogenic. Therefore, as yet, our treatment is mostly empirical. For practical purposes, I would like to hear from members of this Society, of those intestinal antiseptics which have been most beneficial in their practice. The vast majority of fevers, which come under our observation in this valley, are preceded by gastro-intestinal disturbances, making it highly probable that the invasion of the system, by the microörganism or by its toxin, takes place from the gastro-intestinal tract.

DR. G. A. HARE, of Fresno: I have come to the conclusion, in my own practice, that intestinal antisepsis is in the lead of every other consideration. It is a fact that nature has provided us with the means of keeping the alimentary canal in an aseptic condition, and, as long as we live in harmony with nature's laws, bodily vigor can be maintained at the highest degree of perfection. We have the digestive fluids, every one of which are not only aseptic, but also in some degree antiseptic. These, when in a normal condition, present a strong barrier to the entrance of pathogenic organisms. In every case in which the normal activity of the bowels is diminished, we get a lessened action of the liver and stomach which renders it impossible for the digestive fluids to properly perform their work; in fact, the chemical composition of the digestive fluids often becomes quite changed. Nature has not only provided our bodies with the means of preventing an increase of the noxious germs which find their way into the alimentary canal, but she has also provided the means for their destruction. During the past two or three years the theory of antitoxines has made wonderful developments. The theory rests upon the physiological fact that one of the chief functions of the white blood corpuscles is the production of nucleins which, of themselves, are antitoxines, and by their presence in the blood in sufficient quantities, may render the body immune to most contagious diseases. In cases of febrile diarrhea, laxatives are always useful, in the beginning of the attack, but antisepsis is the sheet anchor. Flint, only a year or two ago, announced that the danger from typhoid fever was in high temperature. Brand comes along and proves that he lessened the mortality to 1 per cent. or less, but did not claim that he materially lessened the temperature. Woodbridge says he saves every case, and that in 7,800 cases treated by various physicians with his system of intestinal antisepsis, the mortality has been kept down to 1 or 2 per cent. Nature is not able to flood the alimentary canal with antiseptic fluid to prevent the multiplication of the pathogenic germ from which life is endangered. We should try and keep every part of the alimentary canal under the influence of antisepsis, and if we do not the germs will fill our patient full of toxins. Of intestinal antiseptics, calomel stands at the head. Next we have carbonate of guaiacol and salol, which should be followed by saline cathartics. We thus stop the production of the poison and give the system a chance to throw off that which has been already absorbed. In my opinion the one method of dealing with enteric fever, to get satisfactory results, is the method of intestinal antisepsis.

DR. I. S. ESHLEMAN, of Fresno: There is an old remedy in cases of incipient typhoid fever, we used to call ten and ten; that is, 10 grains each of calomel and jalap. It is pretty good antiseptic treatment. It cleans out the whole alimentary canal with one dose without waiting to give small doses every fifteen minutes.

DR. PEDLAR, of Fresno: As has been said, we are as yet upon the threshold in this matter. This is, to my mind, one of the most inviting fields to-day confronting the medical student. The list of so-called antiseptics is almost endless. Most all have their uses. We do not arrive at more definite results in treating specific diseases, because we are unable to comprehend the complex conditions in which bacterial activity is most favored. No more can we, as yet, say, just how far bacteria are responsible for given pathological processes. The different media found in different parts of the intestinal tract and the varying character of the infesting microbes will, in time, be, I hope, so classified in their dependent relations, that the use of antiseptic agents shall become less empirical. We must not expect that salol, thymol, naphthol, guaiacol, or mercurials are equal to every emergency.

Abscess of the Brain.—J. B. ROSSON, of Tulare, read a paper upon this subject. He said it was as necessary to report our failures and mistakes as our successes and discoveries. No surgeon can be absolutely certain of the pathological lesion which is hidden from his observation, the symptoms of which are often obscure. This is specially the case in cerebral lesions. Here serious lesions were often accompanied by few symptoms; on the other hand, a slight lesion or a small clot may give rise to a complete hemiplegia. After some further discussion of cerebral lesions, the speaker then reported a case which he regarded as unique. The patient, a man aged 39 years, when first seen complained of pain in the left side of the head, extending from before backwards in a straight line from the frontal to the occipital bone. The pain was not severe. It was easily controlled by morph. sulph. ⅛ gr. and antikamnia 5 grs. He had for years suffered with chronic ear trouble on that side. Three weeks after this first visit the speaker was summoned and found the patient insensible and suffering from a right hemiplegia. A positive diagnosis was not made at the time, but after a few days' observation the existence of pus was suspected. The patient had at this time become more rational, when, at a visit two weeks after the paralysis had set in, a tumor as large as an orange was found to have developed over the left parietal region, and the hemiplegic symptoms were also completely relieved. This tumor was subsequently opened, a large quantity of pus and some clotted blood being evacuated. Drainage was established and for four weeks pus continued to be discharged. Meanwhile the patient was so far recovered as to be able to walk about and to gain considerably in weight. Two days later he again complained of pain at the site of the incision, and the speaker thought he detected a small fragment of bone under the scalp. At a later date an horse-shoe incision was made over the site of the former tumor and a small detached piece of bone was removed. Five holes in the cranium were found, arranged in a circle about two inches in diameter. These were united with a bone forceps, and the portion detached was removed. The remaining bone was healthy and the dura mater was found to be firmly attached to the margins of this healthy bone, thus effectually shutting off the general cranial cavity. Acting under the advice of his consultants, the speaker did not open the dura. This membrane, while dark, gave a sense of fullness, but without fluctuation. The patient did very well after the operation, the wound healing by first intention. About four weeks later the patient expressed a desire to turn on his right side. He did so and died instantly, respiration stopping before the heart had ceased to beat. *Post-mortem* examination revealed another abscess cavity, as large as a walnut, under the dura mater. The cause of death was rupture of this abscess and the escape of its contents into the lateral ventricles.

DR. T. W. HELM, of Porterville: The following case is different from that reported by the author, but it is one that comes under the head of cerebral surgery. The case came under my observation in Texas. The patient was a young man 22 years of age. During his early life he was of average intellect and moderate education, and he would be considered of average standard when he arrived at the age of 22. He then gradually began to decline mentally. The first symptoms noticed were indifference and loss of memory. These became more marked until he became unable to take care of himself. His appetite failed and he became emaciated. He was seen by a number of physicians, but the diagnoses were unsatisfactory, and the remedies all proved fruitless. His father finally called to mind that when 11 years of age the patient had fallen off a load of hay to the ground, and for some days he complained of the left side of his head. We then began to investigate. We shaved the scalp and found something wrong about the junction of the temporal and occipital bones. It was a little different from the other side. We anesthetized the patient and laid the skull bare, and sure enough there was a perceptible scar, with a slight indentation. We used the trephine, five-eighths, on the surface, taking out both plates. There was a marked thickening of bone along the line of the scar, osteomatous in character, which showed positive evidence that it pressed upon the dura mater. This membrane was thickened and there was a red congested spot somewhat hard to the touch. It was apparent that in the fall the skull was driven in against the brain tissues. The wound was dressed antiseptically, and in about two days the patient showed an improvement. In about two months the man's intellect was as good as ever. That case convinces me that the cerebral membranes undoubtedly finish their development after that of the bony structure.

DR. A. J. PEDLAR, of Fresno: During the recent Turko-Grecian war, in one of the hospitals, the surgeon in charge reports three cases of abscess of the brain which he operated upon, the abscesses being caused by lodgment of one of the most destructive bullets used in modern warfare. The three cases were operated upon, two with remarkable success. This shows that the brain is amenable to the surgeon's knife to a large degree. Each year adds much of real value to our privileges in connection with this organ.

Placenta Previa.—I. S. ESHLEMAN, of Fresno, in a paper upon this subject, said he was aware his views and practice in this serious complication ran counter to those generally held upon the subject. Long ago he had decided in favor of the forceps and anesthesia, as against version. Under the latter, statistics seemed to show that one-third of the mothers and two-thirds of the children were lost. Using the other method, the speaker said he had been able to conduct the few cases that he had met, with more than the usual statistical success The first objection was to tampons and all appliances designed to dilate the os. Rigid os was not an accompaniment of hemorrhage. Dilating and tamponing reverses nature's process. The speaker then quoted at some length from the "American Text-Book of Obstetrics," deprecating the practice there advised. He then discussed the methods of those advocating version, and pointed out that this, as well as the necessary dilatation and tamponing, were both opposed to the physiology of labor. When called to a case of labor in which the symptoms indicated placenta previa he allowed labor to progress, moderate hemorrhage remaining unchecked, as he believed it tended to relax the os. When the latter had become sufficiently patulous to admit of the introduction of two fingers he proceeded to search for the free edge of the placenta, and if this, when found, was not completely detached, the process was completed. If the placenta was centrally located he made an opening through it and applied the forceps directly to the head. The head was then brought down, thus arresting the hemorrhage, and at the same time providing a support for the placenta not already detached. The case could then be allowed to rest, though delivery, if not effected by the natural forces unaided, could be expedited in the presence of great exhaustion. The speaker said he had delivered a case in this manner, both mother and child surviving. Five other cases of central implantation which he had recorded resulted in the mother being saved in every instance. All the viable children that were found alive were saved.

DR. E. C. DUNN, of Fresno: The subject is an interesting one to me, and especially so at present, from the fact that I have just had a case of placenta previa, the third in my practice, and I hope it will be my good fortune never to have another. Last Wednesday night I was at an entertainment when a man came after me, saying that his wife was taken sick, and remarked that she was flowing, and that I had better get there as soon as possible. Fortunately, as they lived at the outskirts of the city, he had a buggy at the door. It was as I expected, judging from his remarks, a case of placenta previa. The bed covers were saturated, and upon examination a stream of blood, apparently as large as my wrist, gushed from the vagina. I, of course, had no expectation of having to encounter such a case, and was unprepared for it. I obtained some absorbent cotton which was in the house, made as hard a tampon as possible, inserted it into the vagina against the os and retained it there. I told the husband to get another physician as soon as possible, as I did not feel that I could leave the bedside, nor dare even to allow the tampon to relax its pressure against the os. He returned in about an hour with assistance. About four weeks previously she had a discharge of blood and a few slight pains. I gave her about seven doses in twenty-four hours of Hayden's viburnum compound, and kept her quiet and in bed for three or four days. She got up after the third day and attended to her household duties as usual. The three cases that I previously had were at full term, and the hemorrhage had been excessive in all of them. It seemed to me that my patients were exsanguinated, and that they had lost almost all the blood that they had. Judging from these three cases and from my reading, my judgment and experience has been that the best procedure is version. In the present case, after the arrival of assistance the patient was anesthetized, the tampon removed and the hand introduced. The os, that had previously been about the size of a quarter of a dollar, was now dilated to about the size of a silver dollar. I introduced my fingers as a wedge and gradually dilated, but found no indication of pain. I detached the placenta all that I could, and when one-half of the circumference had been loosened up I put it aside and brought down the head, which was lying just above the upper edge of a fold of placenta. I then discovered that my patient was almost pulseless. I gave her some aromatic spirits of ammonia. Her pulse would vary, and she would become sick, very faint and almost pulseless. I was not satisfied to leave the child in that position, so after a short consultation I decided to turn and bring the feet down, and inside of an hour from the time my consultant arrived the child was delivered. If I had had the experience of Dr. Eshleman I might agree with him in his mode of procedure. Judging from the three cases I have had, and three others seen in consultation, I believe that version is the ideal method in placenta previa, especially when you have a central attachment. When you desire to block the canal, as the author states, you can bring the feet down and do it with much more facility than you can place your instruments in that high position. Anyone who has ever attempted to apply the forceps with the head well up knows that it is not an easy matter, by any means, and it seems to me that the added delay you would have in tamponing or blocking the os by the presenting head to be retained there by the force of the uterine contractions would at least be a contraindication of the use of the forceps.

DR. ESHLEMAN: Did you lose the children in the three cases?

DR. DUNN: I have never been able to save a child at full term in placenta previa, with even a one-third attachment. In the central attachment, I have never seen it done, and it is a question in my mind, if a patient loses the amount of blood that took place in the cases that I am familiar with, whether it is possible to save the child. It seems to me it would be almost miraculous to have that amount of blood lost and save the child as well as the mother. I consider that I have done well to save the mother in these cases.

DR. G. H. AIKEN, of Fresno: I believe there is no condition in obstetrical practice that confronts us with such gravity, unless it be convulsions. It has been my unfortunate lot to have three cases of placenta previa of my own, and to have seen two with other physicians. All the mothers were saved, but only one of the children, and that was apparently the most severe case, with central location of the placenta. I think a case I saw with Dr. Pedlar was nearly complete. The child that was saved was that in the case of central location, and the severest of all. I made a central opening, separated the edges of the placenta, brought the head down and delivered naturally. The uterine contractions were good, notwithstanding the loss of blood. I think I never had but one more difficult case of resuscitation in my life, and I expect the vast majority of children are sacrificed from absolute necessity. The author is certainly to be complimented upon the number he has saved. Save both if possible; if not, save the mother should be the rule. For delivery we must have a dilated cervix. In partial placenta previa we may not have much hemorrhage, but when complete, dilatation of the cervix means hemorrhage. To deliver, we must dilate to the extent of the diameter of the head of the child, which is three inches. In placenta previa we often find the patient exsanguinated; hemorrhage has proceeded to such an extent that we have inertia of the uterus. What is to be done? There are three things: Stop the hemorrhage, dilate the cervix, and deliver the woman. How? I have always followed the practice of that eminent, and I believe as successful obstetrician as there is—Robert Barnes. His method is to separate the placenta to the extent of the introduction of the fingers. If it is central, go through it; if the membranes are intact, rupture them. Bring the head down against the placenta, and keep it there with a binder. I have to differ with the author; instead of using the forceps I use a binder. The first thing is to stop the hemorrhage, and this can be done by separating, as far as possible, all the placenta within reach of the finger. Contraction of the uterus is the natural and best hemostatic we have, but we cannot always get it. I agree with Dr. Eshleman as regards recent writers. It seems to me to be rational that the forceps are far less dangerous than version, because it has been proven that *post-partem* deaths are due not to hemorrhage so much as to septic infection from the bruised condition of the passages, and this, together with the shock, renders turning a most dangerous procedure. The order of methods in delivery should be: First, forceps; second, version; third, craniotomy. I believe in five cases I have turned but once. I remember one craniotomy, and I believe the others were delivered with instruments, or in the natural way.

DR. W. H. COOK, of Bakersfield: About a week ago I was called to see a patient who had been suffering from slight hemorrhage. The same patient was under my care about 18 months ago, with placenta previa, and came very near dying. Upon examination after this call I found that there was a miscarriage or abortion. I put her under the rest treatment for thirty-six hours, the hemorrhage still continuing, though passive. I decided to deliver, and within half an hour I delivered a six months' fetus, together with the afterbirth, or a part of it. It appeared adherent, and with my placental forceps I removed what I thought was left. About an hour afterwards I was called in great haste to see the patient, who was suffering from hemorrhage. I found a cord, which from its feel I thought had been introduced by the husband, as he is rather inclined to be mischievous. I made it taut by hooking my placental forceps over it, and following it up found this body [fetus exhibited], which I delivered together with the afterbirth adherent thereto. In this case the cord was not severed. The first fetus was between five and six months, close to the sixth. This I consider between six weeks and two months. I consider this a very unusual case. Though I had read of them I had never seen one, and I have practised medicine since 1874.

Chronic Hydrocephalus.—W. H. COOK and J. L. CARSON, of Bakersfield, reported a case of chronic hydrocephalus, exhibiting the patient: M. A. C——, aged 9 years. Born in Flagstaff, Arizona, August 10, 1888. Natural labor; eighth child; two younger; no abortions or miscarriages. Both parents healthy with good family history. Father born in Pennsylvania; age at time of child's birth, 38 years. Mother born in Illinois, at above time, 35 years. All the other children healthy and robust. No hereditary taint in family on either side shown by family history for two or three generations. At two months, child began to suffer severe pain followed by "great fulness in front part of head." Fulness continued to increase till, at the end of 2½ years, the circumference was 28½ inches. The present dimensions are occipito-frontalis 19½ inches; over coronal suture, 21 inches; circumference, 28½ inches. Early dental development normal. Patient was under the care of Dr. Burns, formerly of Selma, California, who tapped five times. At the last two operations "a quart"[?] was drawn off at each sitting. There is no history as to an examination of the liquid. The arrested development of the legs, and the partial use of the left hand, will be noted. The child has been generally healthy up to last August, when it suffered from an attack of indigestion, since which time it has had a delicate stomach.

Glass in the Rectum.—T. T. KOENIG, of Coulterville, reported an unusual case, in which he removed an ordinary drinking glass from the rectum where it had found lodgment through the patient sitting down upon it with considerable force. It was necessary to enlarge the anus and to amputate a portion of the coccyx in order to remove the foreign body.

Compensation for Medical Expert Testimony.—The following preamble and resolutions, offered by J. A. PEDLAR, of Fresno, were unanimously adopted:

WHEREAS, In view of the fact that the State of California has, at present, no law regulating the matter of compensation of persons liable to be called to give expert testimony in the Courts; and

WHEREAS, Members of the medical profession are frequently called upon to give such testimony;

Resolved, That we, the members of the San Joaquin Valley Medical Society, assembled in semi-annual session, pledge our united efforts to secure the enactment of an adequate statute covering this subject, at the next session of the Legislature; and that to secure this end, we appoint a committee of two members of this Society, to act in conjunction with similar committees to be appointed by other medical organizations throughout the State.

Resolved, That the State Medical Society, the Northern District Medical Society, and the Southern California Medical Society, be earnestly solicited to appoint active committees, who, coöperating, shall formulate and use every honorable means to secure the passage of this much needed legislation.

Resolved, That a copy of these preambles and resolutions be transmitted to the Societies above named.

Derelict Members.—The following resolution, which was adopted, might carry more weight if there were a substantial fine attached for its non-observance.

Resolved, That it is the sense of this Society that when a member allows his name to be placed upon the programme, to prepare a paper, that he is not treating the Society with the courtesy due it, and is also acting contrary to the by-laws, when he does not send his paper to the Secretary, to be read in its regular order, in case of the member's inability to attend the session.

Dr. Luke Robinson.—The following was unanimously adopted:

WHEREAS, We have learned of the death of DR. LUKE ROBINSON, of San Francisco; be it by this Society,

Resolved, That recognizing in DR. ROBINSON a man gifted in his profession, devoted to his work, and identified with progressive medicine, we deeply regret his death in the prime of life. By his death the profession has sustained a loss, recognized wherever he was known.

There being no further business, the Society adjourned to meet in Fresno, on the third Tuesday of March, 1898.

New Members.—At the different sessions the following were duly elected members of the Society:

W. H. COOK,
T. T. KOENIG,
F. S. SMITH,
T. W. HELM,
J. C. MOORE,
H. H. WHITSITT.
J. H. FULKERSON,
H. RODGERS,

OBITUARY.

LUKE ROBINSON, M. D.

DR. LUKE ROBINSON was born in Hoit county, Missouri, June 15, 1842. His family emigrated to Oregon in 1846, and some years later came to California and settled in the Santa Clara valley. He entered the University of the Pacific, then located in the Old Mission of Santa Clara, from which institution he was graduated in 1862. In 1864 he was matriculated at the Toland Medical College and took up the study of medicine under the auspices of the late Dr. H. H. Toland, graduating from that institution in 1867. He remained in San Francisco one year after receiving his degree, as assistant to his preceptor, and at the expiration of this time he took the medical examination for the army, and was soon thereafter detailed for service, but, owing to a prolonged illness, he was unable to enter upon his duties. On his recovery he resigned from the army and took up his residence in Santa Clara, where he soon acquired a large practice, and where he became known as a brilliant surgeon and a successful practitioner. While residing here he had charge of the Small-pox Hospital during a virulent and wide-spread outbreak of this disease, at which time he rendered signal service in the successful management of quarantine of the sick. In 1870 he removed to Colusa, to engage in the practice of his profession in connection with Dr. W. H. Belton. In 1871 Dr. Robinson married Miss Geneva E. Brooks, daughter of the late Captain Alphonso Brooks, of Virginia. On the passage of the bill regulating the practice of medicine in the State of California, in 1876, he served several years as a member of the State Board of Examiners. He continued the practice of his profession at Colusa until 1883, in which year he went to Europe to pursue a more extended course of study and observation. He took up his residence in London, and during the following year passed the examination for membership of the Royal College of Physicians. On his return to California he took up his professional labors in San Francisco, devoting his especial attention to the surgical diseases of women. He received the appointment of gynecologist and senior surgeon to St. Mary's Hospital, which position he held at the time of his death. He was also a Director in the San Francisco Polyclinic and Clinical Professor of Gynecology. He was twice elected President of the California Academy of Medicine. Dr. Luke Robinson was a man cast in a large mould. His mind was comprehensive, vigorous and analytical. He was masterful in all that he understood. He possessed all that is best in genius, namely, an unlimited capacity for work of the highest order, energy and concentration of thought and purpose. His mind was strong and his memory phenomenal. What he knew, he knew *de profundo;* what he undertook, he carried to completion. He detested superficiality and pretense. He was nothing if not thorough—if not genuine. Personally, Dr. Robinson was fearless; he had the courage of his convictions; he was outspoken and direct in speech, but his words conveyed his innermost thoughts; his guileless nature abhorred obliquity and indirection. With Dr. Robinson self-sacrifice in the discharge of duty rose to heroism. While afflicted with a profound disorder, when suffering intense pain, he visited and received his patients daily, and continued to do so up to a few hours of his death. He was perfectly cognizant of his peril, but steadfastly refused to lie down and wait for "the inevitable hour." In the death of Dr. Robinson the profession has lost a great physician, society a good and a noble man, his intimates a loyal and a devoted friend. No eulogium transcends the merits of his character. None may find in the record of this memorial tablet, that—

> "When all is done, upon the tomb is seen:
> Not what he was, but what he should have been."

But the sweet tribute by the immortal Bard shall be graven there:

> "His life was gentle and the elements so mixed in him, that nature might stand up and say to all the world, this was a man."

W. S. T.

REVIEWS AND NOTICES.

REFERENCE BOOK OF PRACTICAL THERAPEUTICS. By various authors. Edited by Frank P. Foster, M. D., editor of the *New York Medical Journal* and of Foster's Encyclopedic Medical Dictionary. In two volumes. Volume II. New York: D. Appleton & Co. pp. 614.

The present volume only emphasizes the favorable opinion which its predecessor had caused us to form of this work. Several months' use of the first volume has convinced us that we were not wrong in supposing that this would be found to be one of the most useful consulting works ever furnished to the physician. One of the most important articles in the second volume is that on serum therapy. This contribution, by Dr. Austin O'Malley, extends over nearly thirty pages, and deals not only with the method of preparing serum, but states very fairly the position of the more important antitoxines in the medical opinion of the day. In this volume many of the animal extracts are discussed in relation to their value as therapeutic agents. One or two important omissions have been made. The Schott treatment of heart disease has attracted deserved attention during the last few years, yet we have failed to find any reference to it under the name of its author, baths, hydriatics, massage or similar title, under which it might have been mentioned. As already stated, this work is one of a few out of a very large number of medical works that have recently been published that is worth purchasing.

FEEDING IN EARLY INFANCY. By Arthur V. Meigs, M.D. Philadelphia: W. B Saunders; pp. 16. Price, 25 cents.

In this little pamphlet the author proposes for infant feeding a mixture composed of cream, milk, sugar and lime water, in proportions to make its analysis correspond with that of human milk. The plan is undoubtedly the only correct one on which to proceed; but the objection to any such fixed formula is that it will not answer in every case. Such a formula can be taken only as a food generally suitable, but subject to modification to meet individual peculiarities. Rotch's plan is the more scientific one—to make the proportions correspond with the needs of the individual infant, and not with any preconceived notion of what infants need. This little pamphlet, nevertheless, contains much practical information, and is well worth reading.

INEBRIETY, ITS SOURCE, PREVENTION, AND CURE. By Charles Follen Palmer. New York: Fleming H. Revell Company. pp. 110.

The author presents his subject in five chapters, under the headings: (1) The nervous-mental organizations. (2) The inebriate's first step toward a cure. (3) The remedying of the preinebriate morbid conditions and the strengthening of the bases of self-control. (4) The inebriate's continued progress in building up moral manhood. (5) Moral characteristics and various types of the inebriate. In the opening chapter of his little book, the writer goes into physiological details in connection with morbid conditions and natural inheritance, leading to the development of inebriety. He lays stress upon the real relationship of many cases of nervous and mental diseases to drunkenness; that in many cases a person is not insane because he drinks, but that he drinks because he is insane or neuropathic; that the morbid manifestations of inebriety are the results of disease and not due to wickedness. Aside from this, the treatise gives the usual extreme views on the subject of inebriety and philosophizes in somewhat tiresome repetitions on what should be the efforts of the inebriate to become restored physically and morally to manhood, to which the author adds in places theosophical interpretations of the influence of religion on the moral education of the inebriate.

DISEASES OF THE EAR, NOSE, AND THROAT, AND THEIR ACCESSORY CAVITIES; A CONDENSED TEXT-BOOK. By Seth Scott Bishop, M.D., LL.D., Professor in the Chicago Post-Graduate Medical School and Hospital; Surgeon to the Illinois Charitable Eye and Ear Infirmary; Consulting Surgeon to the Illinois Masonic Orphans' Home, and to the Silver Cross Hospital of Joliet. Illustrated with 100 colored lithographs and 168 additional illustrations. One volume, royal octavo. Philadelphia: The F. A. Davis Co. Extra cloth, $4.00; Sheep or half Russia, $5.00.

There are several features of this work to which attention can be called with advantage. They are its conciseness and extra freedom from theoretical and controversial considerations; its profuse and excellent illustrations; and its including in one book the naturally allied subjects of the ear, nose, throat, and the accessory cavities. It has been prepared with especial reference to the needs of the student, and of the general practitioner who is unable to spend the time requisite to master the more elaborate works on all these special subjects. The author has devoted considerable space to the consideration of the modern operation for disease of the mastoid, and to diphtheria and its treatment by serum therapy. Any one desiring a work on these subjects, presented in a practical, concise, and clear manner, will find the book of Dr. Bishop, who is a well known author and teacher, all that could be expected.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held October 5, 1897, the following were granted certificates to practise medicine in this State:

Mary Ann Armstrong. Jamestown, N. Y.; Med. Dept. Univ. Michigan, June 26,'79.
Wesley W. Barkwell, Los Angeles; Detroit Coll. of Medicine, Mich., Mar. 25,'89.
James F. Bell, Portland, Or.; Univ. Toronto, Ontario, Canada, June 7,'82.
Charles W. De Motte, Pomona; Med. Dept. State Univ., Iowa, Mar. 2,'81.
Patrick Dougherty, Los Angelels; Chicago Med. Coll., Ill., Mar. 25,'84.
George S. Eddy Anaheim; Coll. Phys. and Surg. Chicago, Ill., Apr. 21,'96.
Sylvester Gwaltney, San Pedro; Marion-Sims Coll. of Med., Mo., Mar. 23,'93.
Benjamin F. Hamell, San Francisco; Med. Dept. Univ. Pennsylvania, Mar. 14,'63.
F. L. A. Hamilton, Visalia; Missouri Med. Coll., Mo., Mar. 6,'88.
Edwin V. Heaton, Corona; Barnes Med. Coll., Mo., Mar. 17,'96.
John Hewetson, Riverside; McGill Univ., Montreal, Canada, Apr. 1,'91.
George O Jefferson, Portland, Or.; Med. Dept. Univ. Michigan, June 27'89.
Levi D. Johnson. Whittier; Atlanta Med. Coll., Ga., Mar. 31,'97.
Sally Lachmann, Los Angeles; Supreme Board of Examiners, Germany, Feb. 26,'95.
Fred E. Lilley (lieu certificate), Merced; Coll. Phys. and Surg., Baltimore, Md., Mar. 18,'90.
B J. Loomis, Los Angeles; Med. Dept. Univ. Buffalo, N. Y, Feb. 26,'84.
B F. Malaby, San Francisco; Beaumont Hosp. Med. Coll., Mo., Mar. 16,'93.
Frederick W. Wilson, Baltimore, Md.; Baltimore Univ. School of Med., Md., Apr. 16,'96.
David H. Rand, Portland, Or.: Med. Dept. Willamette Univ., Or., Apr. 11,'85.
Henry N. Rice, Santa Ana; Rush Med. Coll., Ill., Feb. 16,'86
Alexander W. Shields, Santa Rosa; Coll. Phys. and Surg., Chicago, Ill., Apr. 3,'94.
F A. Thorn, San Francisco; Coll. Phys and. Surg., Chicago, Ill., Mar. 24,'91.
George A. Woelffel. Whitesboro; Coll. Phys. and Surg., Iowa, Mar. 16,'96.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific) from September 20, 1897, to October 20, 1897.

Captain George M. Wells, Assistant Surgeon, having been relieved from duty in this department, by virtue of Par. 16, S. O. No. 192, War Department, A. G. O., Captain Charles M. Gandy, Assistant Surgeon, is designated to assist the Chief Surgeon of the Department in the duties of attending surgeon whenever called upon for such service. Par. 2, S. O., 103, Dept. of Cal., October 19, 1897.

Captain Euclid B. Frick, Assistant Surgeon, and two privates of the hospital corps, to be designated by the Surgeon, the Presidio of San Francisco, will accompany Light Batteries C (Califf's) and F (Potts'), 3d Artillery, under the command of Major David H. Kenzie, 3d Artillery, from the Presidio of San Francisco, California, on the 7th instant, on a practice march to Santa Cruz, California, via Los Gatos and the Hester Creek and Soquel Creek route to Soquel, and return via Watsonville, San Juan, Gilroy and San Jose, California. Par. 1., S. O. 98, Dept. of Cal., Oct. 4, 1897.

Captain Richard W. Johnson, Assistant Surgeon, ordered to proceed from Fort Logan, Colorado, to Fort Douglas, Utah, and report for temporary duty.

Colonel Charles R. Greenleaf, Assistant Surgeon General, will, in addition to his present duties in charge of the Medical Supply Depot in San Francisco, Cal., take charge of the office of the Chief Surgeon, Department of California, during the absence on leave of the Chief Surgeon.

Leave of absence for one month is granted First Lieutenant Thomas J. Kirkpatrick, Jr., Assistant Surgeon, Fort Douglas, Utah.

A board of officers to consist of Colonel Charles R. Greenleaf, Assistant Surgeon General, Major Edward B. Mosley, Surgeon, and Captain Euclid B. Frick, Assistant Surgeon, is appointed to meet at Headquarters Department of California, San Francisco, Cal, on Monday, October 25, 1897, for examination for promotion of officers of the medical department.

Captain Paul F. Straub, Assistant Surgeon, Angel Island, Cal., ordered to report to the president of the examining board, San Francisco, Cal., October 25, 1897, for examination for promotion.

A board of officers to consist of Lieutenant Colonel Alfred A. Woodhull, Deputy Surgeon General, Major Curtis E. Munn, Surgeon, and Captain William F. Lippitt, Jr., Assistant Surgeon, is appointed to meet at Headquarters Department of the Colorado, Denver, Colo., Monday, October 18, 1897, for the examination of medical officers for promotion.

First Lieutenant Harry M. Hallock, Assistant Surgeon, will report to the president of the examining board, at Denver, Colo., October 18, 1897, for examination for promotion.

Official List of Changes in the Medical Department U. S. Navy (Pacific Station) from September 20, 1897, to October 20, 1897.

Medical Inspector J. C. Wise, Past Assistant Surgeon F. A. Hesler, and Assistant Surgeon R. K. Smith, detached from U. S. S. "Philadelphia," and ordered to U. S. S. "Baltimore.' (Carried into effect at Mare Island Navy Yard.)

Medical Director N. L. Bates detached from duty at Museum of Hygiene, Washington, and ordered as Chief of Bureau of Medicine and Surgery. [Died 18th October.]

Assistant Surgeon J. C. Pryor detached from Naval Hospital, Mare Island, Cal., and ordered to U. S. S. "Adams," San Diego, Cal. (The above order revoked, and Past Assistant Surgeon C. P. Bagg detached from the "Marion" and ordered to the "Adams.")

Medical Director W. K. Van Reypen ordered as Chief of Bureau of Medicine and Surgery.

Assistant Surgeon W. B. Grau, detached from Naval Laboratory, Brooklyn, and ordered to Naval Hospital, Mare Island.

Past Assistant Surgeon C. P. Bagg, detached from "Marion," and ordered to "Adams."

Surgeon C. Biddle, detached from Maride Rendezvous, San Francisco, and ordered to Washington in charge of a patient.

ITEMS.

Dr. L. Bazet has removed from the Phelan Building to 908 Geary street, San Francisco, Cal.

Dr. G. F. G. Morgan has removed from Alameda, Cal., to Copperopolis, Calaveras Co., California.

Dr D. H. Trowbridge, of Fowler, Cal., is at present in New York, where he is attending the Post-Graduate Medical School.

Dr. C. E. Cooper, of San Francisco. who has been traveling in Europe for six months, has returned and resumed his practice.

Dr. W. A. Martin has removed from 302 Stockton street to the Spring Valley Water Works Building, southeast corner of Geary and Stockton streets, San Francisco, Cal.